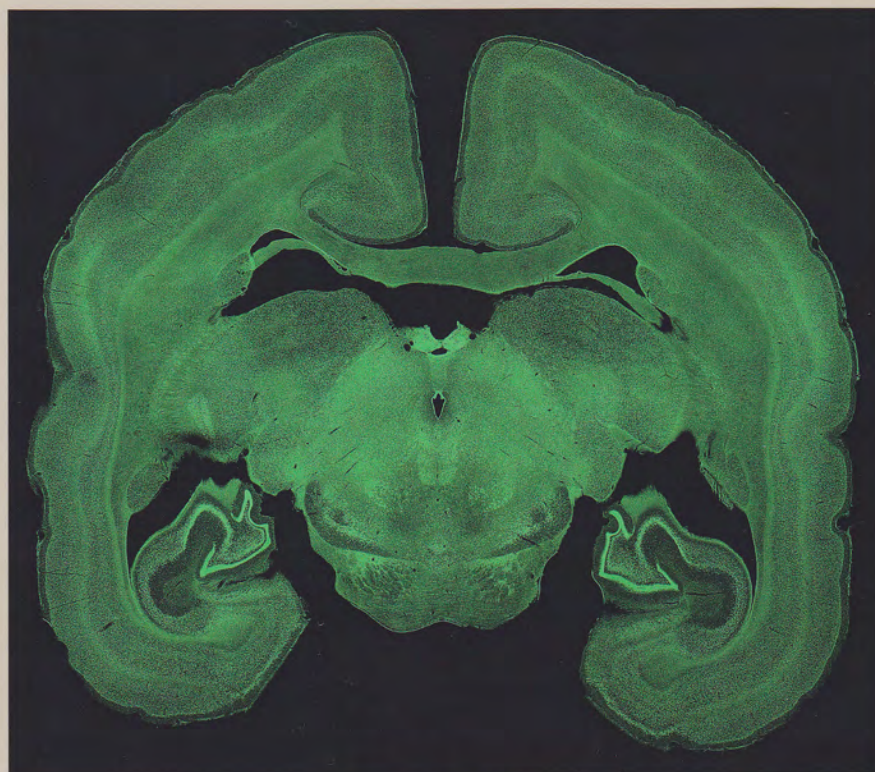
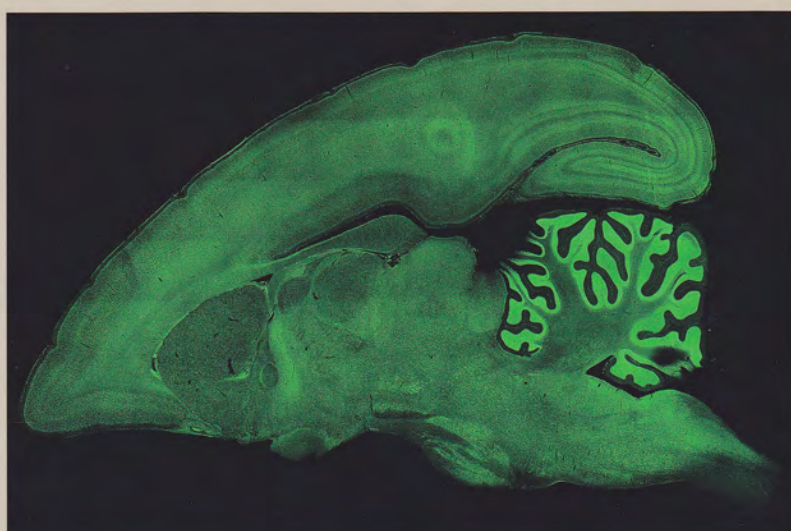


Stereotaxic Atlas of the Marmoset Brain

with Immunohistochemical
Architecture and MR Images

Volume 1

Nissl-stained sections
and their diagrams



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Katsuki Nakamura
Shinichi Kohsaka

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Nissl-stained sections
and their diagrams

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Preface

As president of the National Center of Neurology and Psychiatry, it gives me great pleasure to announce the publication of *Stereotaxic Atlas of the Marmoset Brain*.

The main role of the National Center of Neurology and Psychiatry is to contribute to the investigation and elucidation of mental disorders, neurological disorders, muscular diseases, and developmental disorders, and to provide our fellow citizens with highly advanced medical treatment, based on the results of our research.

In addition to animal models such as mice and rats, the importance of translational research using primates has been on the increase. In particular, in studies of mental and developmental disorders such as autism, it is essential to investigate abnormalities of higher brain function, including communication disorders. In such studies, the marmoset may be a very valuable as animal model, since it forms a family of mother, father and children living as a unit and communicating with each other using animal sounds. As an animal model, the marmoset has several advantages over other primates in that it is relatively easy to handle and feed, weights only about 500 g, and delivers two or three babies twice a year.

On the other hand, there have also been difficulties in using the marmoset as an animal model. We have not had an accurate atlas showing brain structures that have been fully examined, as in the case of mouse or rat, no test method that determines abnormal behavior correctly, and inadequate information on genes and proteins. However, it has been the accumulation of solid sober research in our National Institute of Neuroscience that has solved the problems of using marmoset in research work.

The first result of our studies is this publication of two volumes of *Stereotaxic Atlas of the Marmoset Brain*. We have illustrated the books giving researchers the information they need actually as you see it. We sincerely hope that this publication will help readers both in Japan and overseas achieve dramatic progress in their research into elucidating higher brain function disorders using marmoset.

In closing, I would like to express my sincere gratitude to Dr. Shigeki Yuasa and all the researchers in the National Institute of Neuroscience for their immense contributions.

Teruhiko Higuchi,
President
National Center of Neurology and Psychiatry
Tokyo, Japan

March, 2010

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We are very grateful to Ms. Yumiko Kamagata, Department of Ultrastructural Research for her skillful assistance in the histological work. We are indebted to Drs. Akihiro Izumi, Hidetoshi Ishibashi, Atsuko Saito, Osamu Yokoyama, Shinya Uchida and Koji Kuraoka, Department of Animal Models for Human Disease for their technical assistance. We also thank Megumi Koyanagawa, Keiko Otokuni and Arisa Ishikawa for their daily support. This work has been supported in part by the Research Grant (20B-10) for Nervous and Mental Disorders from the Ministry of Health, Labor and Welfare of Japan and by Strategic Research Program for Brain Science from the Ministry of Education, Culture, Sports, Science and Technology of Japan.

Contents

1. Introduction	
1.1. General remarks.....	1
1.2. General construction of this atlas	2
2. Materials and Methods	
2.1. Histological procedures	3
2.2. MRI	3
2.3. Stereotaxic coordinates.....	4
3. Index of Abbreviations	5
4. Tables of Plates.....	9
5. Plates: Nissl-stained sections and corresponding tracing.....	11
6. Literatures on the Anatomy of Marmoset Brain	172

1. Introduction

1.1. General remarks

Mice have made a great contribution to biomedical science and neuroscience because of its fertility and behavioral properties and development of breeding and genetic engineering techniques. There are, however, big differences in host responsiveness to pathogens, sensitivities to drugs, and characteristics of immune system, and therefore it is very difficult to interpret results from mice for clinical applications in humans. When we consider animal models for nervous and mental disease in particular, rodents are not ideal animals owing to huge differences in structure and functions of nervous system between rodents and humans. Thus, biomedical researchers have wanted primate models for nervous and mental disease that can express introduced genes. Rhesus monkeys (*Macaca mulatta*), the primate species most commonly used in biomedical science so far, have a far lower reproductive power than mice, and this low reproductive power prevented us from developing genetically modified primates.

Common marmosets (*Callithrix jacchus*) are small-bodied New World monkeys. They are endemic to a tropical forest in Brazil. The body weight of adult marmoset ranges 300 to 500 grams, and the body length is 20 to 25 cm. Unlike mice, the average life expectancy is 10 to 15 years and they are diurnal animals like humans. Marmosets have sensory abilities including visual abilities similar to humans. Recently, the small primates, common marmosets, have become the focus of attention of biomedical researchers because of its high reproductive power as well as its biosafety, ease of handling, and low cost for breeding.

Common marmosets reach sexual maturity at about 2 years. The ovarian cycle of common marmoset lasts about 28 days, and the gestation lasts about 5 months. Soon after parturition (within 10 days), female marmosets begin to cycle again and shortly thereafter become pregnant. The inter-birth interval is about 5 months and thus they give birth twice a year. Common marmosets usually give birth to twins; in captive, they can often have triplets. Therefore, female marmosets can have 40 to 60 offspring during their life. In contrast, female rhesus monkeys reach sexual maturity at about 5 years, usually have single birth, and usually have far fewer offspring (less than 10) during their life. This extremely high reproductive power can realize the development of genetically modified primate models for human disease, including nervous and mental disease.

In spite of the high potential of common marmosets as experimental animals for human disease, no brain atlas of marmoset using modern techniques has been available. One historical atlas was published but is now out of print (Stephan, Baron, Schwerdtfeger, 1980). Only one old paper published in a scientific journal is available (Saavedra, Mazzuchelli, 1968). Two brain atlas of marmoset were published in 2008; one (Palazzi, Bordier, 2008) includes slice images stained with acetyl choline esterase and those stained with cresyl violet and the other (Okano, Nomura, 2008) presented MR images acquired with a 7.0-T MR scanner with slice images stained with cresyl violet. We have realized the importance of generating a new brain atlas showing neurochemical characteristics in various regions for biomedical researches on the marmoset brain. We generated a brain atlas presenting serial sections immunostained with anti-calbindin, anti-calretinin, and anti-tyrosine hydroxylase antibodies as well as those stained with cresyl violet. We also added MR images of marmoset brain to meet various demand for biomedical researches.

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1.2. General construction of this atlas

Contents of Vol. 1

Coronal or parasagittal plates of serial sections stained with cresyl violet (Nissl staining) and the accompanying diagrams with labeling of structures. Corresponding plates of adjacent immunohistochemically-stained sections and MRI data in Vol. 2 are shown in the Tables of plates. Stereotaxic coordinates are indicated in the diagrams.

Contents of Vol. 2

Coronal or parasagittal plates of serial sections immunostained with anti-calbindin, anti-calretinin or anti-tyrosine hydroxylase antibody, and MRI data in the serial coronal or parasagittal sections. Corresponding plates of coronal or parasagittal sections stained with cresyl violet (Nissl staining) and the accompanying diagrams with labeling of structures in Vol. 1 are shown in the Tables of plates.

2. Materials and Methods

2.1. Histological procedures

All animal experiments were conducted in accordance with the NIH guidelines for the care and use of laboratory animals, and with the guidelines approved by the ethics committee for primate research of the National Center of Neurology and Psychiatry, Japan. An adult male marmoset, 1.6 years old and weighing 260 g was used for the preparation of coronal sections of the brain. Another adult male marmoset, 1.9 years old and weighing 320 g was used for the preparation of parasagittal sections of the brain. The marmosets were anesthetized with ketamine hydrochloride (30 mg/kg body weight, i.m.) and then a lethal dose of sodium pentobarbital (50 mg/kg, i.p.). Under deep anesthesia, the animals were perfused through the ascending aorta with 4% paraformaldehyde dissolved in 0.1 M phosphate-buffered saline (PBS, pH 7.4), by using a peristaltic pump. The brain was removed, and then postfixed at 4°C for 3 days with the same fixative. The fixed brains were embedded in 3% agar in PBS, and then sliced coronally into 100 μ m sections with a microlicer (DTK-3000, DOSAKA EM, Kyoto, Japan) or sliced parasagittally into 150 μ m sections with a microlicer (DTK-3000W, DOSAKA EM, Kyoto, Japan).

Nissl staining was performed on free-floating sections; sections were incubated in a solution of NeuroTrace 500/525 (fluorescent Nissl stain; Invitrogen, Carlsbad, CA, USA), 1:300 dilution in PBS containing 2% Triton X-100, for 2 hr at the room temperature. After rinse with PBS, the stained sections were mounted and cover-slipped on micro slide glass (76 x 52 mm, 0.8~1.0 mm thickness, Matsunami-glass, Osaka, Japan) with Fluoromount-G (SouthernBiotech, Birmingham, AL, USA).

Immunohistochemical staining was also performed on free-floating sections; the sections were pre-incubated with 10% normal goat serum at 4°C for 1 h. Then, sections were incubated with each primary antibody in PBS containing 2% Triton X-100 at 4°C overnight. The following antibodies were used in this study; anti-calbindin D-28k antibody (rabbit IgG, 1:2000 dilution; Cat. No. CB38a, Swant, Bellinzona, Switzerland), anti-calretinin antibody (rabbit IgG, 1:2000 dilution; Cat. No. 7699/4, Swant, Bellinzona, Switzerland), or monoclonal anti-tyrosine hydroxylase antibody (clone TH-16, mouse IgG, 1:1000 dilution; Cat. No. T2928, Sigma-Aldrich, St. Louis, MO, USA). Sections were then rinsed 8 times with PBS, and incubated with secondary antibody in PBS at 4°C for 5 h. Alexa Fluor 594 goat anti-rabbit IgG (1:500 dilution; Cat. No. A11012, Molecular Probes, Eugene, OR, USA) was used for anti-calbindin D-28k antibody or anti-calretinin antibody. Alexa Fluor 594 goat anti-mouse IgG (1:500 dilution; Cat. No. A11005, Molecular Probes, Eugene, OR, USA) was used for anti-tyrosine hydroxylase antibody. After incubation, the sections were rinsed 5 times with PBS. The stained sections were mounted on micro slide glass (76 x 52 mm, 0.8~1.0 mm thickness, Matsunami-glass, Osaka, Japan) and cover-slipped with Fluoromount-G (SouthernBiotech, Birmingham, AL, USA).

The above sections were examined with HS All-in-one fluorescence microscope BZ-9000 (Keyence Corporation, Osaka, Japan) in order to obtain the integrated images of wide area of the sections with high resolution following the manufacturer's instructions.

2.2. MRI

MRI data were acquired using a 3.0-T MRI scanner (Magnetom Trio; Siemens, Munich, Germany). A custom-built 4ch coil (Takashima Factory Ltd., Hino, Japan) was used for MR signal receiving. During MR imaging, marmosets were anesthetized with ketamine hydrochloride (7.5 mg/kg, i.m.) and pentobarbital sodium (15 mg/kg, i.p.), followed by an intramuscular injection of a mixture of ketamine hydrochloride (7.5 mg/kg) and medetomidine hydrochloride (0.15 mg/kg). The marmoset was fixed to a stereotaxic apparatus and set to the MR scanner. After manual shimming was conducted, high-resolu-

tion T1-weighted images (T1WIs) were obtained using the MPRAGE sequence. For coronal acquisition, parameters were set as TR = 2300 ms, TE = 2.38 ms, TI = 1000 ms, flip angle = 12°, matrix size = 192 × 144, FoV = 66 × 50 mm, slice thickness = 1 mm and total number of slices = 48. For sagittal acquisition, parameters were set as TR = 3000 ms, TE = 2.74 ms, TI = 1000 ms, flip angle = 12°, matrix size = 192 × 192, FoV = 66 × 66 mm, slice thickness = 1 mm and total number of slices = 48. The MR data were interpolated and voxel size was set to 0.174 × 0.174 × 1 mm. In both coronal and sagittal acquisition, numbers of excitations were set at 8 and all MR volumes were averaged in order to increase signal to noise ratio. Each MR volume of coronal and sagittal acquisition was rotated as y-axis on the anterior and posterior commissure (AC-PC) line and z-axis on the interhemispheric fissure. Origins of MR volumes were set at the interaural line on the interhemispheric fissure. On coronal MRI figures, positive y values mean brain slices anterior to the interaural line and negative y values mean posterior slices, and right side of images is right side of brain in the neurological convention. On sagittal MRI figures, positive x values mean brain slices to the right of the interhemispheric fissure.

2.3. Stereotaxic coordinates

Coronal plane: the numbers at the bottom right of each drawing show the anteroposterior distance of the corresponding plate from the vertical plane passing through the interaural line and from the vertical plane passing through the bregma. The numbers on the left margin (on the ordinate) show the dorsoventral distance from the horizontal plane passing through the interaural line. The numbers on the bottom margins (on the abscissa) show the distance of structures from the midline (from the interhemispheric fissure).

Parasagittal plane: the number at the bottom right of each drawing shows the distance of the corresponding plate from the midline (from the interhemispheric fissure). The numbers on the left margin (on the ordinate) show the dorsoventral distance from the horizontal plane passing through the interaural line. The numbers on the bottom margin (on the abscissa) show the anteroposterior distance from the coronal plane passing through the interaural line.

3. Index of Abbreviations

2n	optic nerve	BLI	basolateral amygdaloid nucleus, intermediate part
3n	oculomotor nerve or its root	BLVM	basolateral amygdaloid nucleus, ventromedial part
3N	oculomotor nucleus	BM	basomedial amygdaloid nucleus
3ND	oculomotor nucleus, dorsal part	BMMC	basomedial amygdaloid nucleus, magnocellular part
3NV	oculomotor nucleus, ventral part	BMPC	basomedial amygdaloid nucleus, parvocellular part
3V	3rd ventricle	BMPCV	basomedial amygdaloid nucleus, parvocellular part, ventral division
4n	trochlear nerve or its root	bp	brachium pontis
4N	trochlear nucleus	bsc	brachium of the superior colliculus
4V	4th ventricle	BST	bed nucleus of the stria terminalis
4VLR	lateral recess of the 4th ventricle	BSTIA	bed nucleus of the stria terminalis, intramygdaloid division
4x	trochlear decussation	CA	Cornu Ammonis in the hippocampus
5N	trigeminal nucleus	CA1	field CA1 of hippocampus
6N	abducens nucleus	CA3	field CA3 of hippocampus
6n	root of abducens nerve	CA4	field CA4 of hippocampus
7N	facial nucleus	cal	calcarine sulcus
7n	facial nerve	Cb1	cerebellar lobule 1
8n	vestibulocochlear nerve	Cb2	cerebellar lobule 2
10N	dorsal motor nucleus of vagus nerve	Cb3	cerebellar lobule 3
10n	vagus nerve	Cb4	cerebellar lobule 4
11N	accessory nucleus	Cb5	cerebellar lobule 5
12N	hypoglossal nucleus	Cb6	cerebellar lobule 6
12n	root of hypoglossal nerve	Cb7	cerebellar lobule 7
A1	primary auditory area	Cb8	cerebellar lobule 8
A2	second auditory area	Cb9	cerebellar lobule 9
AA	anterior amygdaloid area	Cb10	cerebellar lobule 10
AB	accessory basal nucleus	cc	corpus callosum
ac	anterior commissure	Cd	caudate nucleus
aca	anterior commissure, anterior part	Ce	central amygdaloid nucleus
Acb	accumbens nucleus	CeL	central amygdaloid nucleus, lateral division
AcbSh	accumbens nucleus, shell	CeM	central amygdaloid nucleus, medial division
AcbC	accumbens nucleus, core	Cg	cingulate cortex
ACg	anterior cingulate gyrus	CG	central gray
acp	anterior commissure, posterior part	chp	choroid plexus
AD	anterodorsal nucleus	CIC	central nucleus of the inferior colliculus
ADH	dorsal hypothalamic area	cic	commissure of the inferior colliculus
AH	Ammon's horn	CIn	insularis cortex
AHA	anterior hypothalamic area	Cl	claustrum
AHi	amygdalohippocampal area	CL	central lateral thalamic nucleus
ALH	lateral hypothalamic area	CLi	caudal linear nucleus of the raphe
alv	alveus of the hippocampus	CM	central medial thalamic nucleus
AM	anteromedial thalamic nucleus	CnF	cuneiform nucleus
Amb	ambiguus nucleus	Co	cortical amygdaloid nucleus
ans	ansiform lobule of the cerebellum	Cop	copula of the pyramis
AO	anterior olfactory nucleus	cp	cerebral peduncle, basal part
APul	anterior pulvinar	cr	corona radiata
Aq	aqueduct	CR	central reticular nucleus
Arc	arcuate hypothalamic nucleus	Crus1	crus 1 of the ansiform lobule
B	basal nucleus (Meynert)	Crus2	crus 2 of the ansiform lobule
BIC	nucleus of the brachium of the inferior colliculus		
bic	brachium of the inferior colliculus		
BL	basolateral amygdaloid nucleus		
BLD	basolateral amygdaloid nucleus, dorsal part		
BLDL	basolateral amygdaloid nucleus, dorsolateral part		

csc	commissure of the superior colliculus	hf	hippocampal fissure
CSG	cortex subgenualis	HR	hippocampus supracommissuralis
ctg	central tegmental tract	ic	internal capsule
Cu	cuneate nucleus	IC	inferior colliculus
cu	cuneate fasciculus	icp	inferior cerebellar peduncle (restiform body)
D3V	dorsal 3rd ventricle	IG	indusium griseum
DA	dorsoanterior extrastriate area	IGP	internal globus pallidus
dbc	decussatio brachii conjunctivi	IH	infundibular nucleus
DCIC	dorsal cortex of the inferior colliculus	ILL	intermediate nucleus of the lateral lemniscus
DEn	dorsal endopiriform nucleus	InfS	infundibular stem
DG	dentate gyrus	InG	intermediate gray layer
DI	dorsointermediate visual area	Int	interposed cerebellar nucleus
dlf	dorsal longitudinal fasciculus	IntA	interposed cerebellar nucleus, anterior part
DLG	dorsal lateral geniculate nucleus	IntP	interposed cerebellar nucleus, posterior part
DLL	dorsal nucleus of the lateral lemniscus	IO	inferior olive
DM	dorsomedial hypothalamic nucleus	IP	interpeduncular nucleus
DM (visual area)	dorsomedial visual area	IPF	interpeduncular fossa
DM10	nucleus dorsalis motorius nervi vagi	IPul	inferior pulvinar
DMC	dorsomedial hypothalamic nucleus compact part	Irt	intermediate reticular nucleus
DPFl	dorsal paraflocculus	IsC	Island of Calleja
DpG	deep gray layer	ITG	inferotemporal gyrus
DpMe	deep mesencephalic nucleus	La	lateral amygdaloid nucleus
DR	dorsal raphe nucleus	Lat	lateral (dentate) cerebellar nucleus
dsc	dorsal spinocerebellar tract	LC	locus coeruleus
DTg	dorsal tegmental nucleus	lcsp	lateral corticospinal tract
ec	external capsule	LD	lateral dorsal thalamic nucleus
ECIC	external cortex of the inferior colliculus	LDSF	lateral dorsal thalamic nucleus, superficial part
ECu	external cuneate nucleus	lenf	lenticular fasciculus
EGP	external globus pallidus	lf	lateral fissure
eml	external medullary lamina	lfp	longitudinal fasciculus of the pons
EPL	external plexiform layer	LG	lateral geniculate nucleus
Er	entorhinal cortex	LH	lateral hypothalamic area
EW	Edinger-Westphal nucleus	LHb	lateral habenular nucleus
ex	extreme capsule	ll	lateral lemniscus
f	fornix	LM	lateral mammillary nucleus
FD	nucleus fasciculus diagonalis	lml	lateral medullary lamina
fi	fimbria of the hippocampus	LMol	lacunosum moleculare layer of the hippocampus
Fl	flocculus	lo	lateral olfactory tract
flm	fasciculus longitudinalis medialis	LP	lateral posterior nucleus
flp	fasciculus longitudinalis pontis	LPA	lateral preoptic area
Fr	frontal cortex	LPB	lateral parabrachial nucleus
fr	fasciculus retroflexus	LPul	lateral pulvinar
FRP	formatio reticularis pontis	LRt	lateral reticular nucleus
FRT	formatio reticularis tegmenti	LS	lateral septal nucleus
FRTM	formatio reticularis tegmenti mesencephali	LSD	lateral septal nucleus, dorsal part
g7	genu of the facial nerve	LSI	lateral septal nucleus, intermediate part
GC	substantia grisea centralis	LSV	lateral septal nucleus, ventral part
Gi	gigantocellular reticular nucleus	Lu	stratum lucidum of the hippocampus
G1	glomerular layer	LV	lateral ventricle
GL	granular cell layer	LVeN	lateral vestibular nucleus
GP	globus pallidus	lvsp	lateral vestibulospinal tract
Gr	gracile nucleus	M	mamillary nucleus
gr	gracile fasciculus	M1	primary motor area
GrDG	granular layer of the dentate gyrus	m5	motor root of the trigeminal nerve
H	campus Foreli		
Hb	habenular nucleus		
HDB	nucleus of the horizontal limb of the diago-		

MC5	magnocellular layer of the caudal spinal trigeminal nucleus	Per	periamygdaloid nucleus
mcp	middle cerebellar peduncle	PF	parafascicular thalamic nucleus
MD	mediodorsal thalamic nucleus	PFC	prefrontal cortex
MDC	mediodorsal thalamic nucleus, central part	PH	posterior hypothalamic area
MDD	mediodorsal thalamic nucleus, dorsal part	Pi	pineal gland
MDL	mediodorsal thalamic nucleus, lateral part	PM	paramedian lobule
MDM	mediodorsal thalamic nucleus, medial part	PMn	paramedian reticular nucleus
MDR	medullary reticular nucleus	PMnR	paramedian raphe nucleus
Me	medial amygdaloid nucleus	Pn	pontine nuclei
ME	median eminence	PnO	pontine reticular nucleus, oral part
Me5N	mesencephalic trigeminal nucleus	POA	preoptic area
Med	medial (fastigial) cerebellar nucleus	POm	parietooccipital medial area
mfb	medial forebrain bundle	PON	preoptic nucleus
MG	medial geniculate nucleus	Pp	peripeduncular nucleus
MGD	medial geniculate nucleus, dorsal part	PP	posterior parietal cortex
MGM	medial geniculate nucleus, medial part	PPFl	posterior paraflocculus
MGV	medial geniculate nucleus, ventral part	PPTgC	pedunculopontine tegmental nucleus, compact part
MHb	medial habenular nucleus	PPTgD	pedunculopontine tegmental nucleus, diffuse part
Mi	mitral cell layer	PPY	prepiriform cortex
ML	medial mammillary nucleus, lateral part	Pr	prepositus nucleus
ml	medial lemniscus	PrCO	precentral orbital area
mlf	medial longitudinal fasciculus	ProS	prosubiculum
MM	medial mammillary nucleus, medial part	PrS	presubiculum
mml	medial medullary lamina	Pu	putamen
MnR	median raphe nucleus	Pul	pulvinar nuclei
Mo5N	motor trigeminal nucleus	PV	paraventricular thalamic nucleus
Mol	molecular layer of the dentate gyrus	Pv	parietal ventral area
MPA	medial preoptic area	py	pyramidal tract
MPB	medial parabrachial nucleus	pyrs	pyramis
MPr	motor and premotor cortex	pyx	pyramidal decussation
MPul	medial pulvinar	R	raphe nucleus
MS	medial septal nucleus	RA	radiatio acustica
MT	middle temporal visual area	rcc	rostrum of the corpus callosum
MTc	middle temporal crescent visual area	Re	reuniens thalamic nucleus
mtt	mamillothalamic tract	ReIC	recess of the inferior colliculus
MVeN	medial vestibular nucleus	RMC	red nucleus, magnocellular part
MVeNMC	medial vestibular nucleus, magnocellular	RMg	nucleus raphe magnus
MVeNPC	medial vestibular nucleus, parvocellular	RN	red nucleus
NCS	central superior tegmental nucleus	RO	radiatio optica
oc	olivocerebellar tract	ROb	raphe obscurus nucleus
OcC	occipital cortex	RP	nucleus raphe pallidus
On	olivary nuclei	RPC	red nucleus, parvocellular part
ON	olfactory nerve layer	RS	retrosplenial cortex
opt	optic tract	Rt	reticular thalamic nucleus
OT	olfactory tubercle	RTP	nucleus reticularis tegmenti pontis
ots	occipitotemporal sulcus	RtTg	reticulotegmental nucleus of the pons
OV	olfactory ventricle	S	subiculum
ox	optic chiasm	S1	primary somatosensory area
PaC	parietal cortex	s5	sensory root of the trigeminal nerve
PAG	periaqueductal gray	SC	superior colliculus
PaP	paraventricular hypothalamic nucleus, parvocellular part	SCG	superficial gray layer of superior colliculus
PaS	parasubiculum	SCN	suprachiasmatic nucleus
Pav	paraventricular hypothalamic nucleus	SCO	subcommissural organ
PBG	parabigeminal nucleus	scp	superior cerebellar peduncle (brachium conjunctivum)
pc	posterior commissure	Sep	septum
PCRt	parvocellular reticular nucleus	SFi	septo-fimbrial nucleus
PCTg	paracollicular tegmentum		

SFO	subfornical organ		
SGe	supragenual nucleus	VAL	amygdala
SHi	septohippocampal nucleus		ventral anterior thalamic nucleus, lateral part
SI	substantia innominata	VAM	ventral anterior thalamic nucleus, medial part
Sim	simple lobule		
sm	stria medullaris of the thalamus	VC	ventral cochlear nucleus
SMH	supramamillary hypothalamic nucleus	VCA	ventral cochlear nucleus, anterior part
SMV	superior medullary velum	VCo	ventral cortical amygdaloid nucleus
SN	substantia nigra	VCP	ventral cochlear nucleus, posterior part
SNC	substantia nigra, compact	VDB	nucleus of the vertical limb of the diagonal band
SNr	substantia nigra, reticular part		
SO	superior olive	VeN	vestibular nuclei
Sol	solitary nucleus	VH	ventral horn
SON	supraoptic nucleus	vhc	ventral hippocampal commissure
SOR	supraoptic nucleus, retrochiasmatic part	VL	ventral lateral thalamic nucleus
sox	supraoptic decussation	VLA	ventrolateral anterior extrastriate area
Sp5	spinal trigeminal nucleus	VLG	ventral lateral geniculate nucleus
sp5	spinal trigeminal tract	VLL	ventral lateral thalamic nucleus, lateral part
spth	spinothalamic tract	VLM	ventral lateral thalamic nucleus, medial part
st	stria terminalis	VLP	ventrolateral posterior extrastriate area
STG	superior temporal gyrus	VMH	ventromedial hypothalamic nucleus
STh	subthalamic nucleus	VP	ventral pallidum
STS	superior temporal sulcus	VPFl	ventral paraflocculus
SuM	supramammillary nucleus	VPL	ventral posterolateral thalamic nucleus
SVeN	superior vestibular nucleus	VPM	ventral posteromedial thalamic nucleus
TE	temporal cortex	VR	ventral raphe nucleus
TP	temporal polar cortex	vsc	ventral spinocerebellar tract
ts	tectospinal tract	VTA	ventral tegmental area
TuO	tuberculum olfactorium	xml	decussation of medial lemniscus
V1	primary visual cortex	xscp	decussation of the superior cerebellar peduncle
V2	second visual area		
VA	ventral anterior thalamic nucleus	ZI	zona incerta
VACo	ventral anterior cortical nucleus of the		

4. Tables of plates

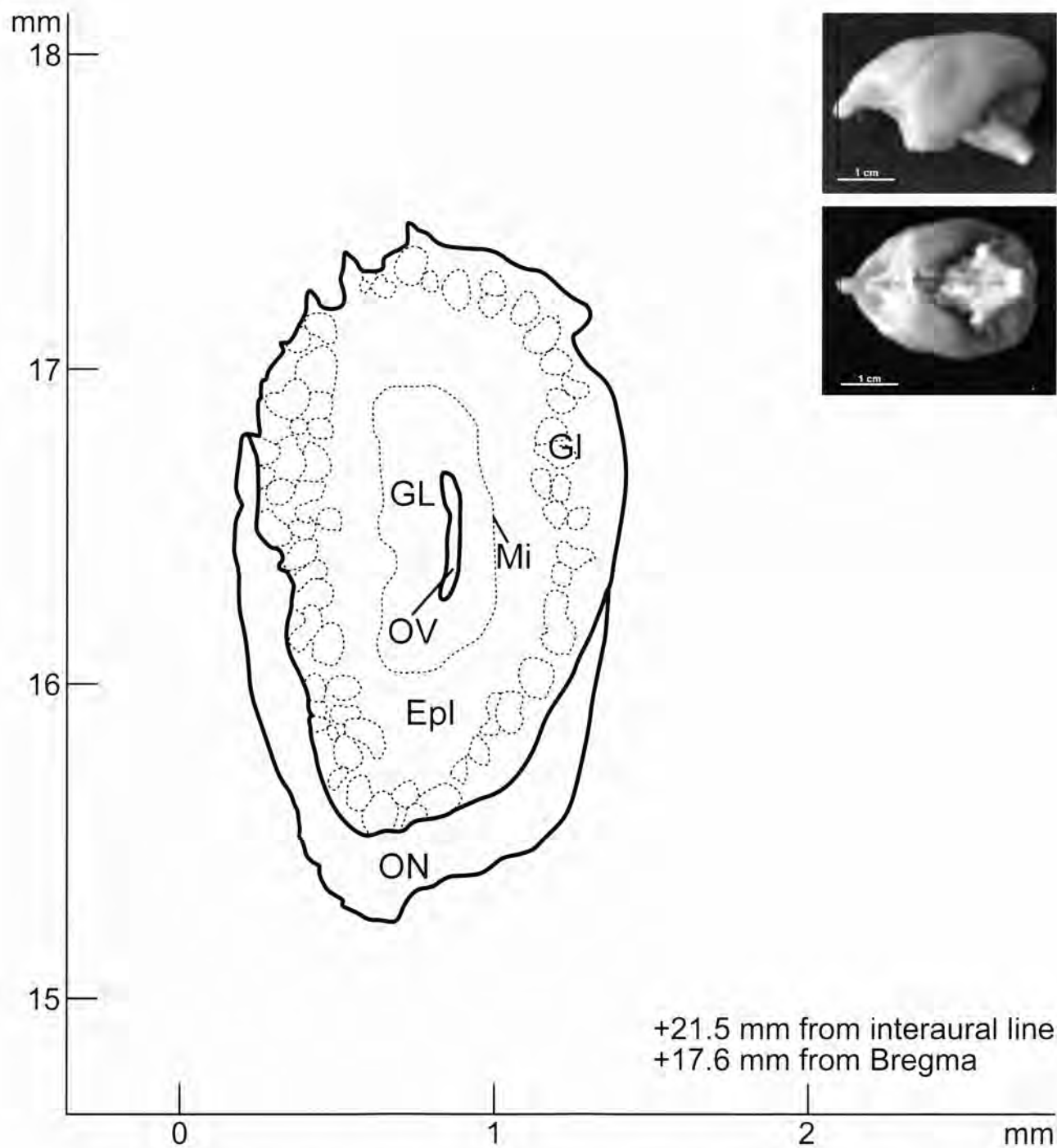
coronal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
cTr-01	cNissl-01				
cTr-02	cNissl-02				MRI cor-01
cTr-03	cNissl-03				
cTr-04	cNissl-04				MRI cor-02
cTr-05	cNissl-05				MRI cor-03
cTr-06	cNissl-06	cCalb-06	cCR-06	cTH-06	MRI cor-04
cTr-07	cNissl-07				
cTr-08	cNissl-08	cCalb-08	cCR-08	cTH-08	
cTr-09	cNissl-09	cCalb-09	cCR-09	cTH-09	MRI cor-05
cTr-10	cNissl-10				
cTr-11	cNissl-11	cCalb-11	cCR-11	cTH-11	
cTr-12	cNissl-12	cCalb-12	cCR-12	cTH-12	MRI cor-06
cTr-13	cNissl-13				
cTr-14	cNissl-14	cCalb-14	cCR-14	cTH-14	
cTr-15	cNissl-15	cCalb-15	cCR-15	cTH-15	MRI cor-07
cTr-16	cNissl-16				MRI cor-08
cTr-17	cNissl-17	cCalb-17	cCR-17	cTH-17	
cTr-18	cNissl-18	cCalb-18	cCR-18	cTH-18	MRI cor-09
cTr-19	cNissl-19	cCalb-19	cCR-19		
cTr-20	(cCalb-20)	cCalb-20	cCR-20		MRI cor-10
cTr-21	cNissl-21	cCalb-21	cCR-21	cTH-21	
cTr-22	cNissl-22	cCalb-22	cCR-22	cTH-22	
cTr-23	cNissl-23				
cTr-24	cNissl-24				MRI cor-11
cTr-25	cNissl-25				
cTr-26	cNissl-26	cCalb-26	cCR-26	cTH-26	
cTr-27	(cCalb-27)	cCalb-27		cTH-27	
cTr-28	(cCalb-28)	cCalb-28	cCR-28	cTH-28	
cTr-29	(cCalb-29)	cCalb-29	cCR-29		MRI cor-12
cTr-30	cNissl-30		cCR-30	cTH-30	
cTr-31	cNissl-31		cCR-31	cTH-31	
cTr-32	(cCalb-32)	cCalb-32	cCR-32	cTH-32	
cTr-33	cNissl-33	cCalb-33	cCR-33	cTH-33	MRI cor-13
cTr-34	cNissl-34	cCalb-34	cCR-34	cTH-34	
cTr-35	cNissl-35	cCalb-35	cCR-35	cTH-35	
cTr-36	cNissl-36	cCalb-36	cCR-36	cTH-36	MRI cor-14
cTr-37	cNissl-37	cCalb-37	cCR-37	cTH-37	
cTr-38	cNissl-38	cCalb-38	cCR-38	cTH-38	
cTr-39	cNissl-39	cCalb-39			MRI cor-15
cTr-40	cNissl-40	cCalb-40		cTH-40	
cTr-41	cNissl-41			cTH-41	
cTr-42	cNissl-42				

coronal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
cTr-43	cNissl-43	cCalb-43	cCR-43	cTH-43	MRI cor-16
cTr-44	cNissl-44	cCalb-44	cCR-44	cTH-44	
cTr-45	cNissl-45	cCalb-45	cCR-45	cTH-45	
cTr-46	cNissl-46	cCalb-46	cCR-46	cTH-46	MRI cor-17
cTr-47	cNissl-47	cCalb-47	cCR-47	cTH-47	
cTr-48	cNissl-48	cCalb-48	cCR-48	cTH-48	
cTr-49	(cCalb-49)	cCalb-49	cCR-49	cTH-49	MRI cor-18
cTr-50	cNissl-50	cCalb-50	cCR-50		
cTr-51	cNissl-51	cCalb-51	cCR-51		
cTr-52	cNissl-52	cCalb-52	cCR-52		MRI cor-19
cTr-53	cNissl-53	cCalb-53	cCR-53		MRI cor-20
cTr-54	cNissl-54		cCR-54		MRI cor-21
cTr-55	cNissl-55		cCR-55		
cTr-56	cNissl-56	cCalb-56	cCR-56		MRI cor-22
cTr-57	cNissl-57	cCalb-57	cCR-57		
cTr-58	cNissl-58	cCalb-58	cCR-58		MRI cor-23
cTr-59	cNissl-59	cCalb-59	cCR-59		
cTr-60	cNissl-60	cCalb-60	cCR-60		
cTr-61	cNissl-61	cCalb-61	cCR-61		MRI cor-24
cTr-62	cNissl-62	cCalb-62	cCR-62		
cTr-63	cNissl-63	cCalb-63	cCR-63		MRI cor-25
cTr-64	cNissl-64				MRI cor-26
cTr-65	cNissl-65	cCalb-65	cCR-65		MRI cor-23
cTr-66	cNissl-66	cCalb-66	cCR-66		MRI cor-26

parasagittal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
psTr-01	psNissl-01	psCalb-01	psCR-01		MRI psg-01
psTr-02	psNissl-02	psCalb-02	psCR-02	psTH-02	MRI psg-02
psTr-03	psNissl-03	psCalb-03	psCR-03	psTH-03	MRI psg-03
psTr-04	psNissl-04	psCalb-04		psTH-04	
psTr-05	psNissl-05	psCalb-05	psCR-05	psTH-05	MRI psg-04
psTr-06	psNissl-06	psCalb-06	psCR-06	psTH-06	
psTr-07	psNissl-07	psCalb-07	psCR-07	psTH-07	MRI psg-05
psTr-08	psNissl-08	psCalb-08	psCR-08	psTH-08	MRI psg-06
psTr-09	psNissl-09	psCalb-09	psCR-09		MRI psg-07
psTr-10	psNissl-10	psCalb-10	psCR-10	psTH-10	
psTr-11	psNissl-11	psCalb-11	psCR-11	psTH-11	MRI psg-08
psTr-12	psNissl-12	psCalb-12	psCR-12	psTH-12	MRI psg-09
psTr-13	psNissl-13	psCalb-13	psCR-13		MRI psg-10~11
psTr-14	psNissl-14	psCalb-14			MRI psg-12

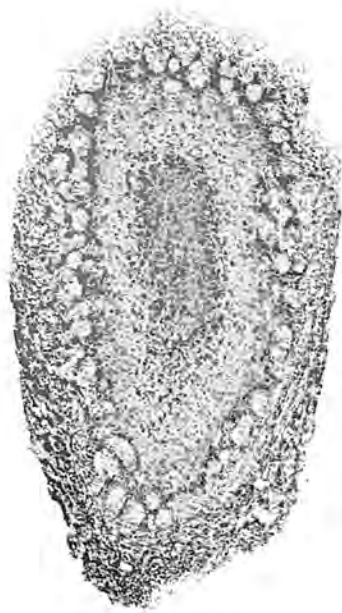
5. Plates: Nissl-stained sections and corresponding tracing

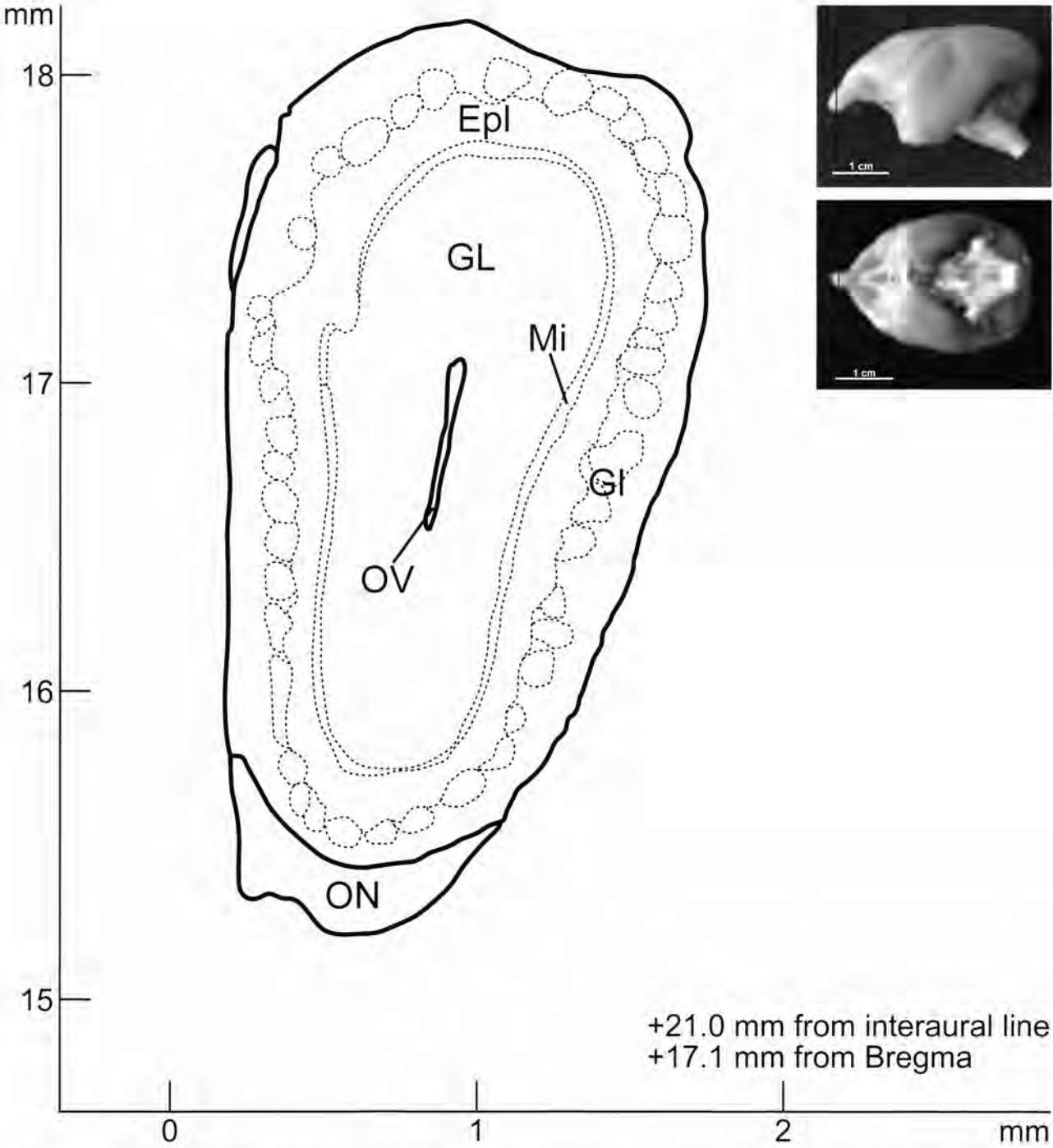
cTr-01



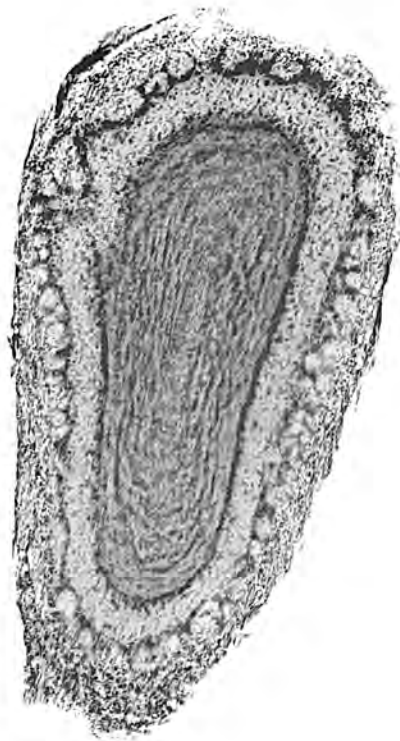
EPL, external plexiform layer; GL, glomerular layer; GL, granular cell layer; Mi, mitral cell layer; ON, olfactory nerve layer; OV, olfactory ventricle.

cNissl-01

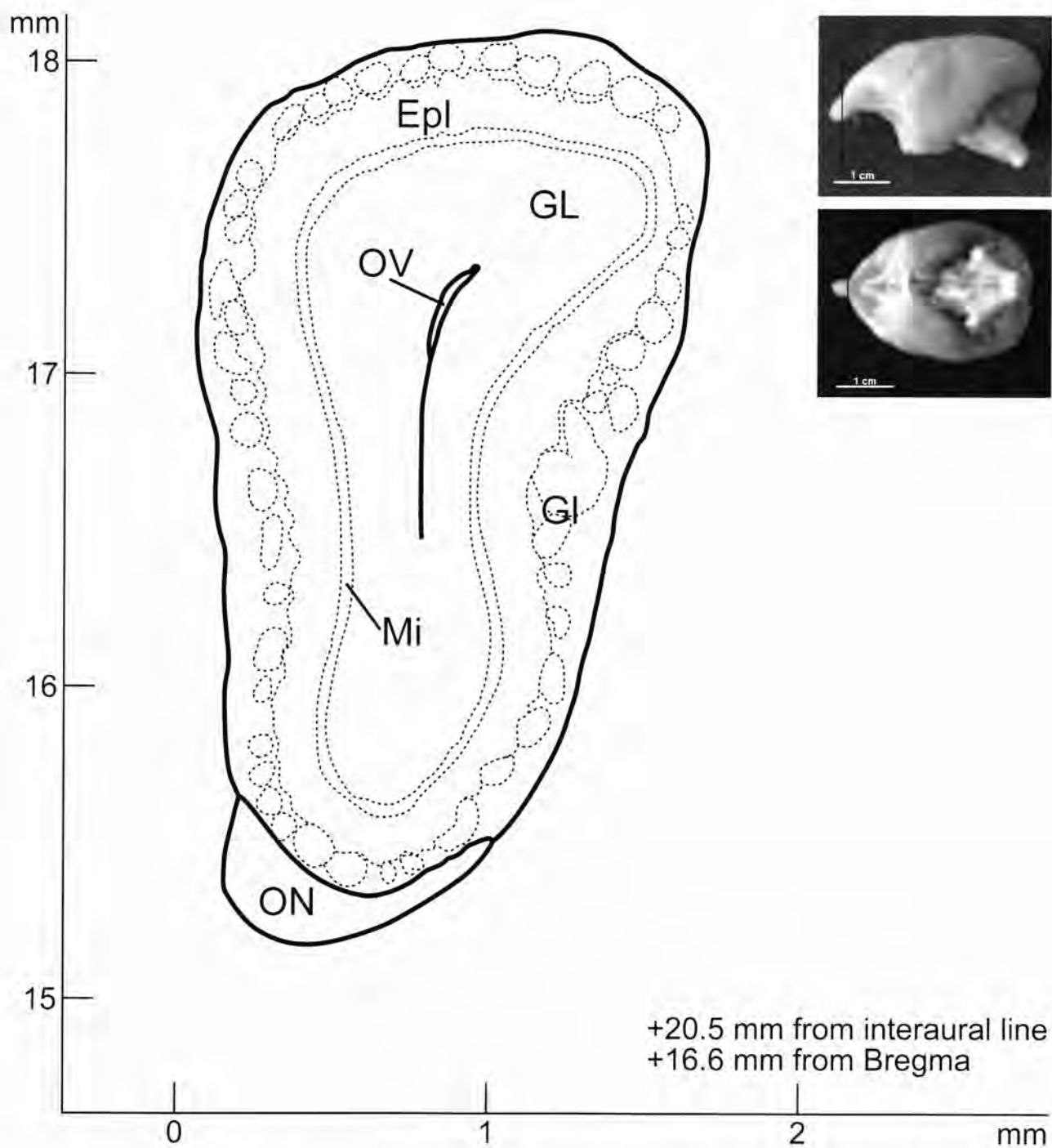




EPL, external plexiform layer; Gl, glomerular layer; GL, granular cell layer; Mi, mitral cell layer; ON, olfactory nerve layer; OV, olfactory ventricle.

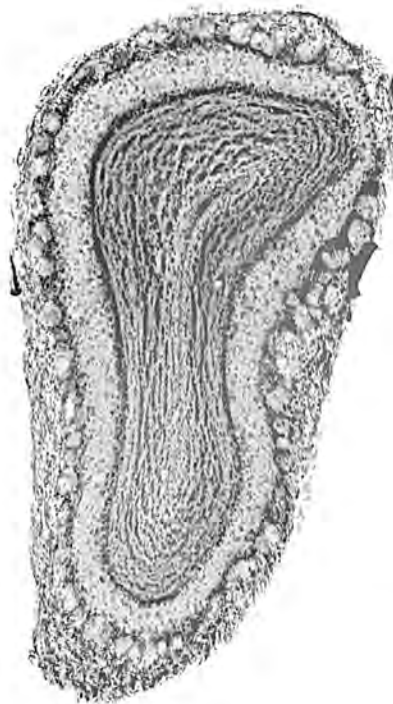


cTr-03

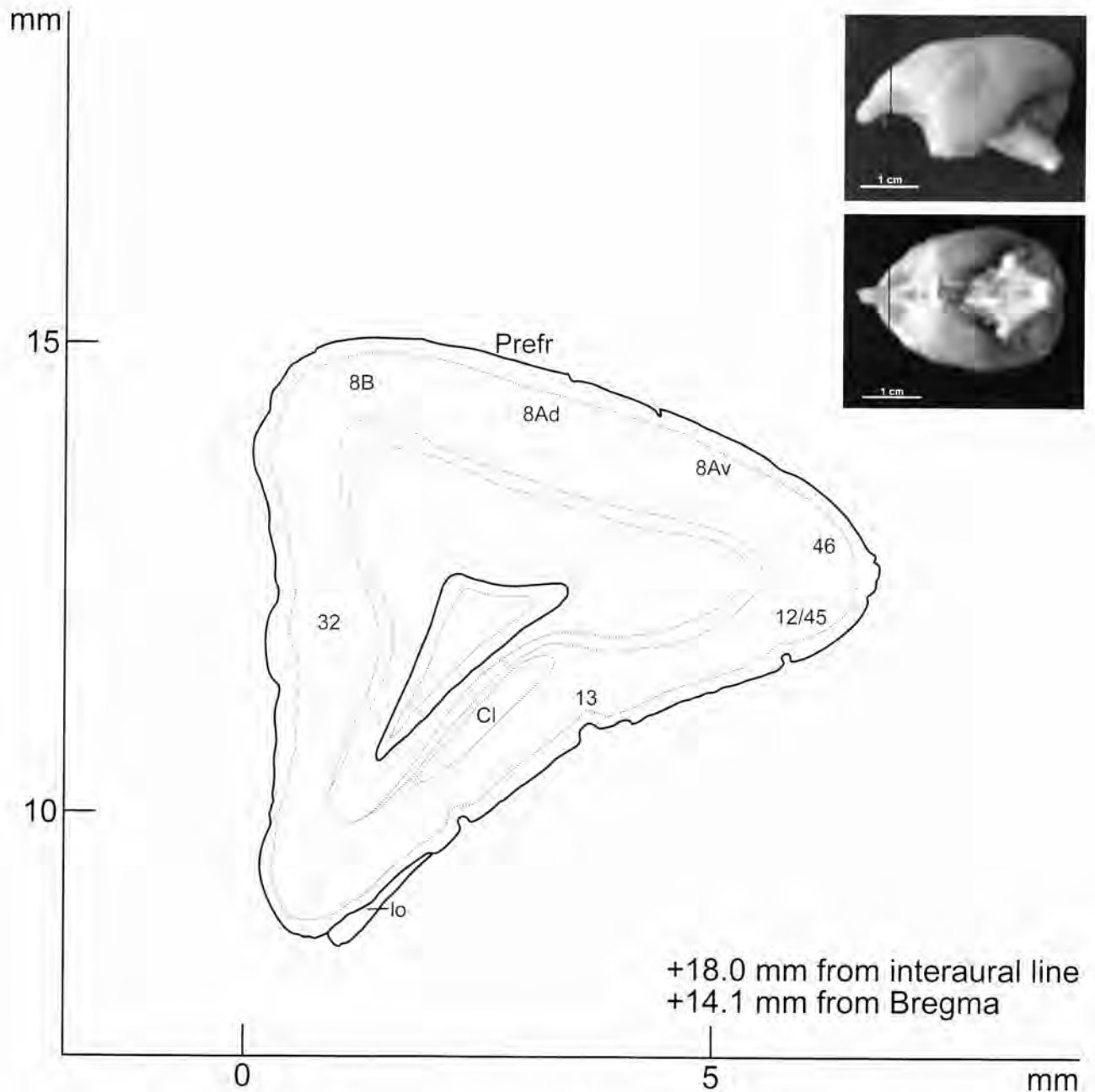


EPL, external plexiform layer; GL, glomerular layer; GL, granular cell layer; Mi, mitral cell layer; ON, olfactory nerve layer; OV, olfactory ventricle.

cNissl-03



cTr-04



8Ad, 8Av, 8B, 12/45, 13, 32, 46, Brodmann's parcellation of the cortex: Cl, claustrum; lo, lateral olfactory tract; Prefr, prefrontal cortex.

Brodman's parcellation of the marmoset cortex is according to the following literature.

Burman KJ, Palmer SM, Gamberini M, Rosa MGP. 2006. Cytoarchitectonic subdivisions of the dorsolateral frontal cortex of the marmoset monkey (*Callithrix jacchus*), and their projections to dorsal visual areas. *J Comp Neurol* 495: 149-172.

Burman KJ, Lui LL, Rosa MGP, Bourne JA. 2007. Development of non-phosphorylated neurofilament protein expression in neurons of the New World monkey dorsolateral frontal cortex. *Eur J Neurosci* 25: 1767-1779.

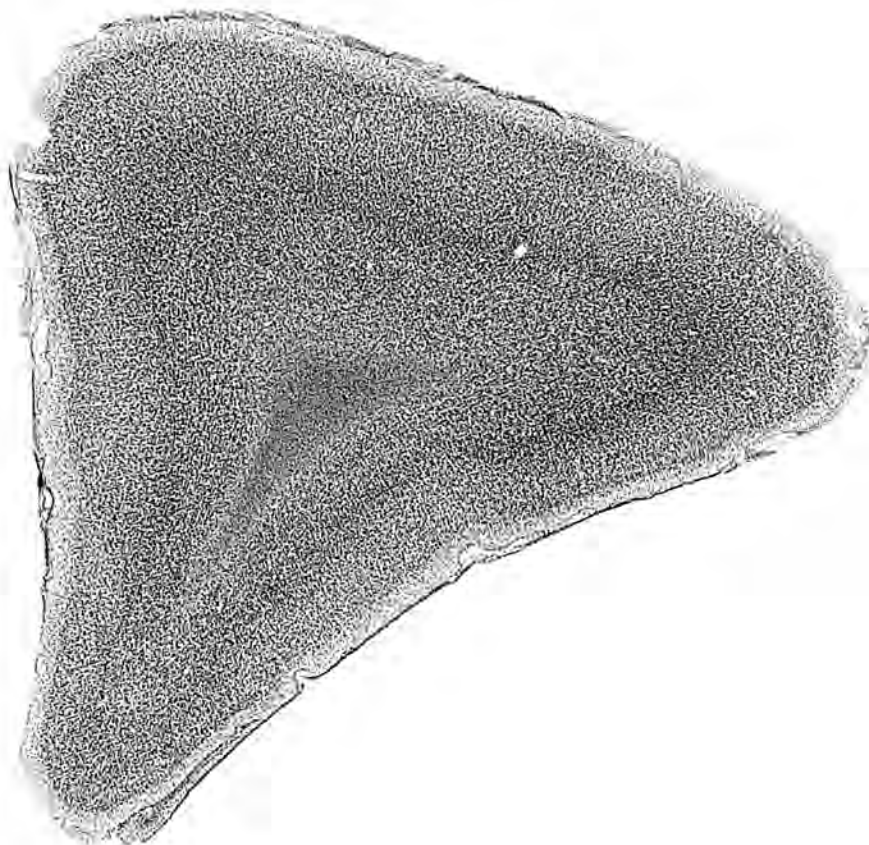
Burman KJ, Palmer SM, Gamberini M, Spitzer MW, Rosa MGP. 2008. Anatomical and physiological definition of the motor cortex of the marmoset monkey. *J Comp Neurol* 506: 860-876.

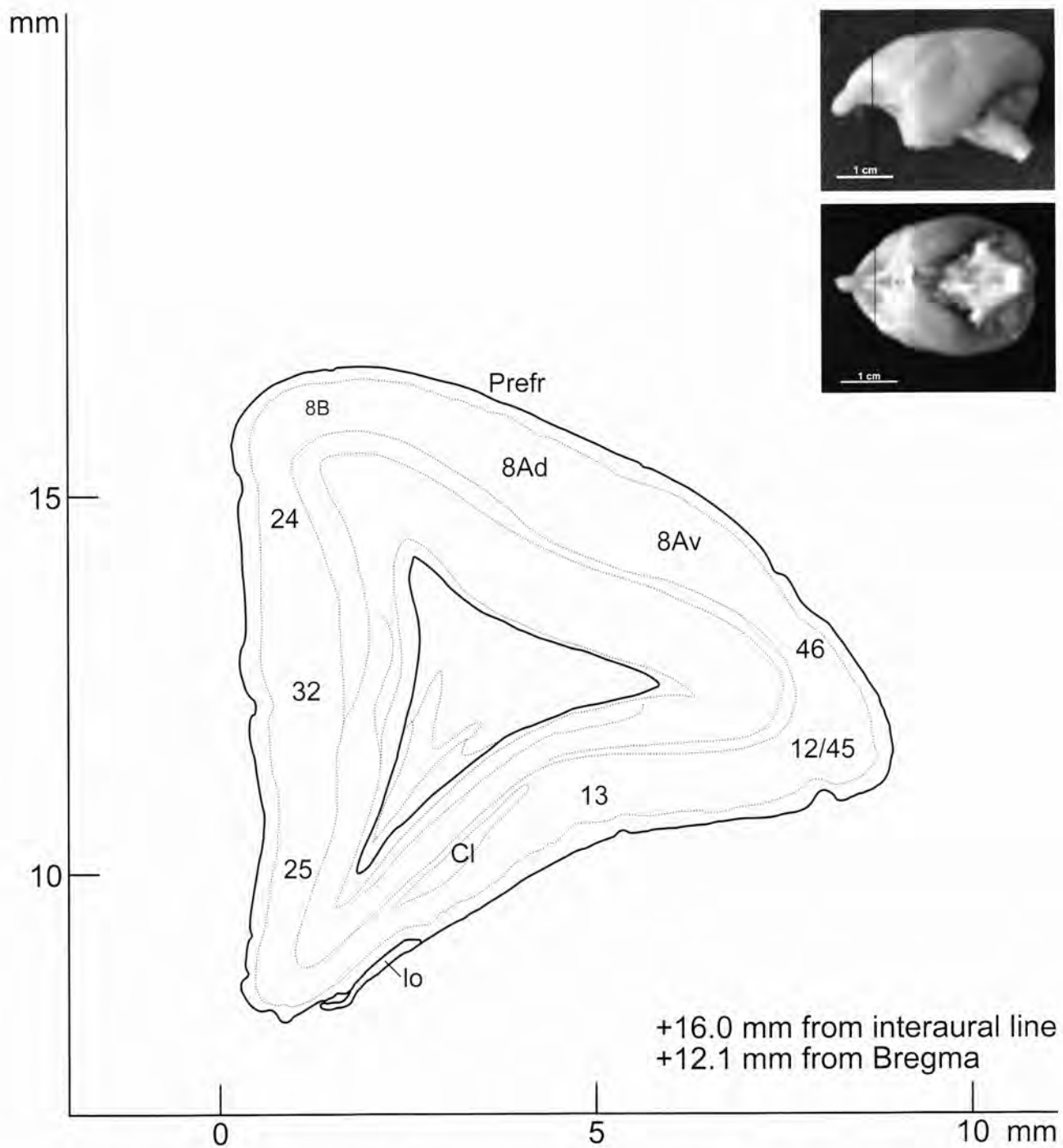
Burish MJ, Stepniewska I, Kaas JH. 2008. Microstimulation and architectonics of frontoparietal cortex in common marmosets (*Callithrix jacchus*). *J Comp Neurol* 507: 1151-1168.

Roberts AC, Tomic DL, Parkinson CH, Roeling TA, Cutter DJ, Robbins TW, Everitt BJ. 2007. Forebrain connectivity of the prefrontal cortex in the marmoset monkey (*Callithrix jacchus*): an anterograde and retrograde tract-tracing study. *J Comp Neurol* 502: 86-112.

Rosa MGP, Tweedale R. 2000. Visual areas in lateral and ventral extrastriate cortices of the marmoset monkey. *J Comp Neurol* 422: 621-651.

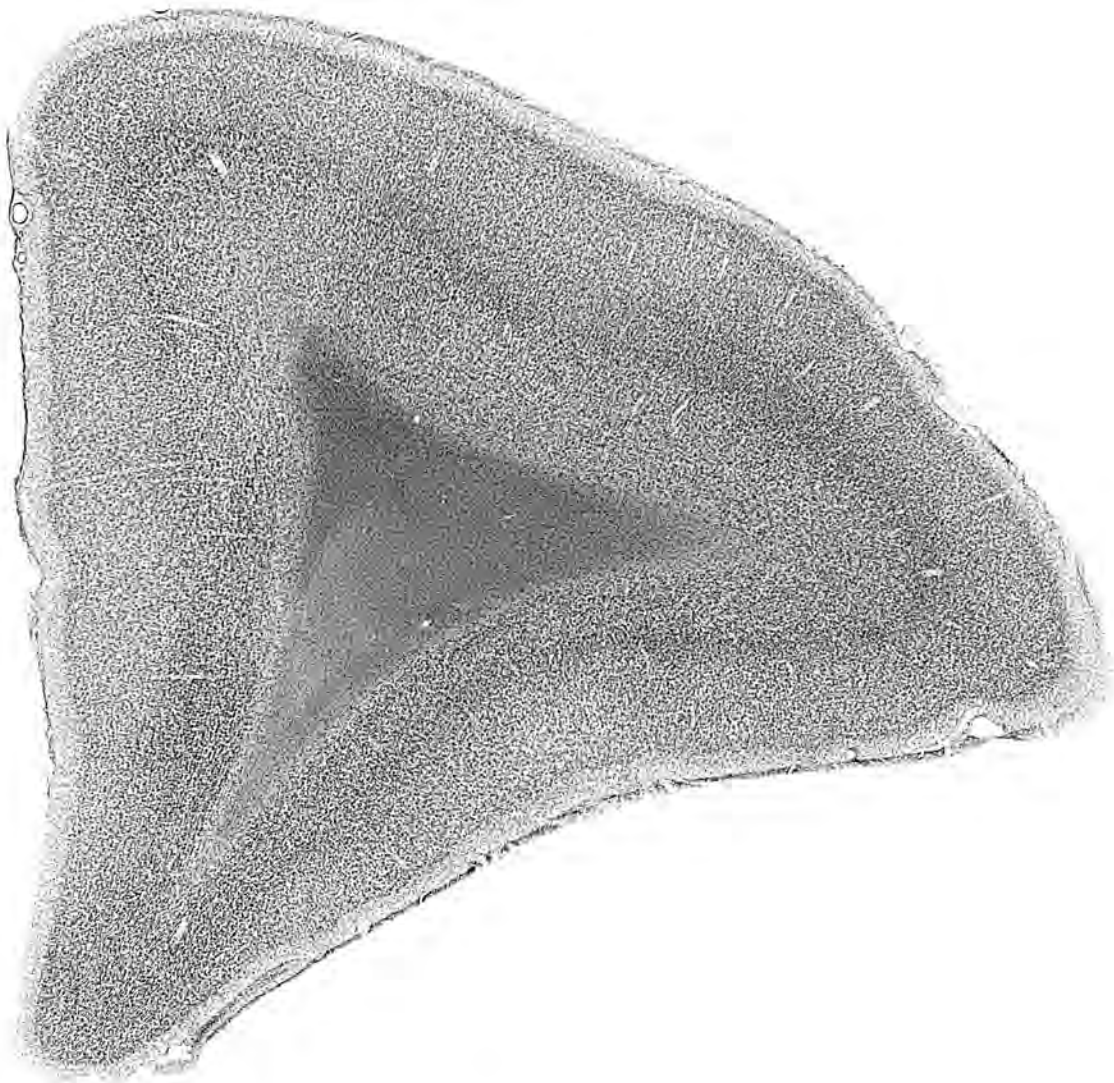
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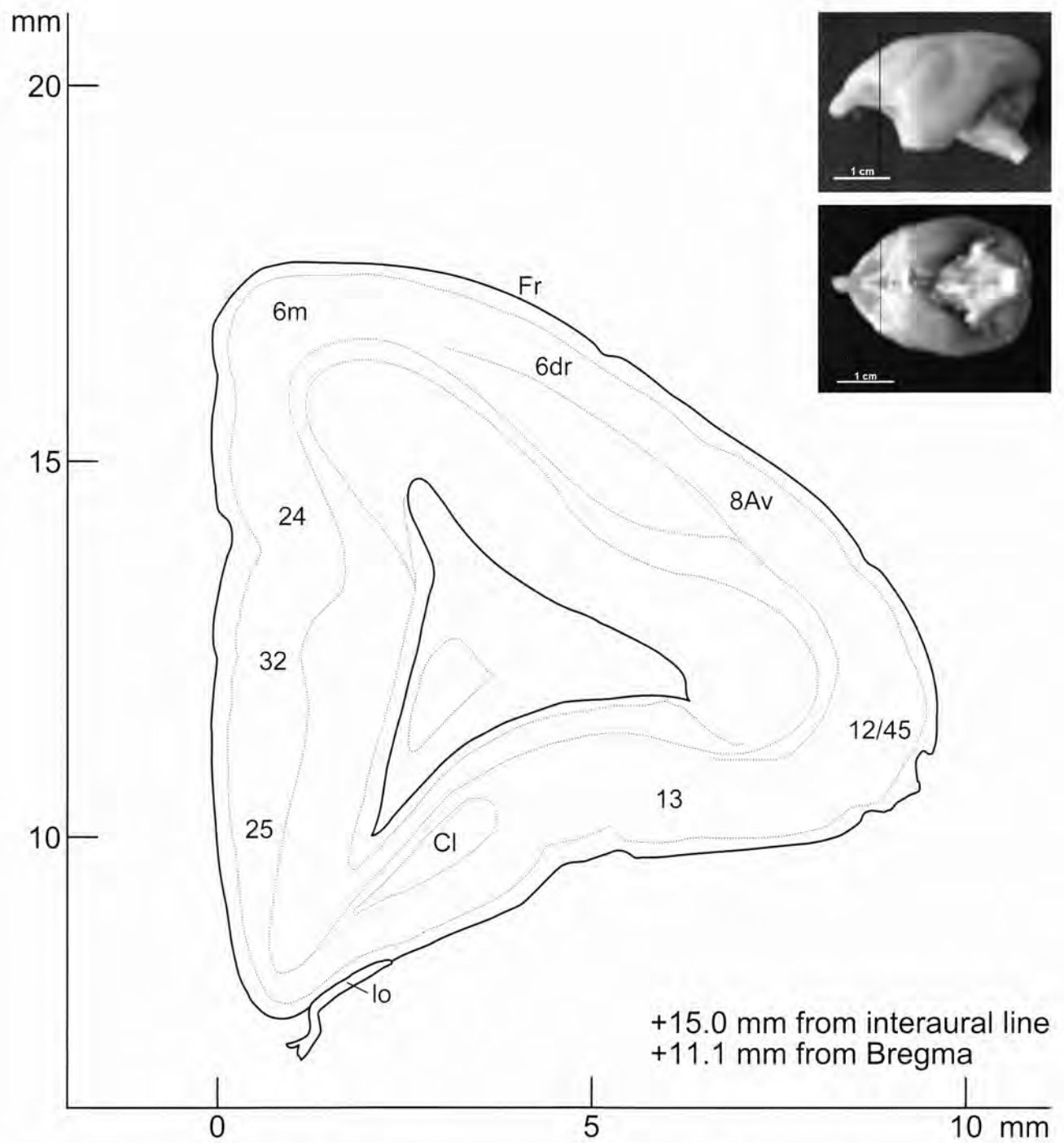


8Ad, 8Av, 8B, 12/45, 13, 24, 25, 32, 46, Brodmann's parcellation of the cortex; Cl, claustrum; lo, lateral olfactory tract; Prefr, prefrontal cortex.

cNissl-05



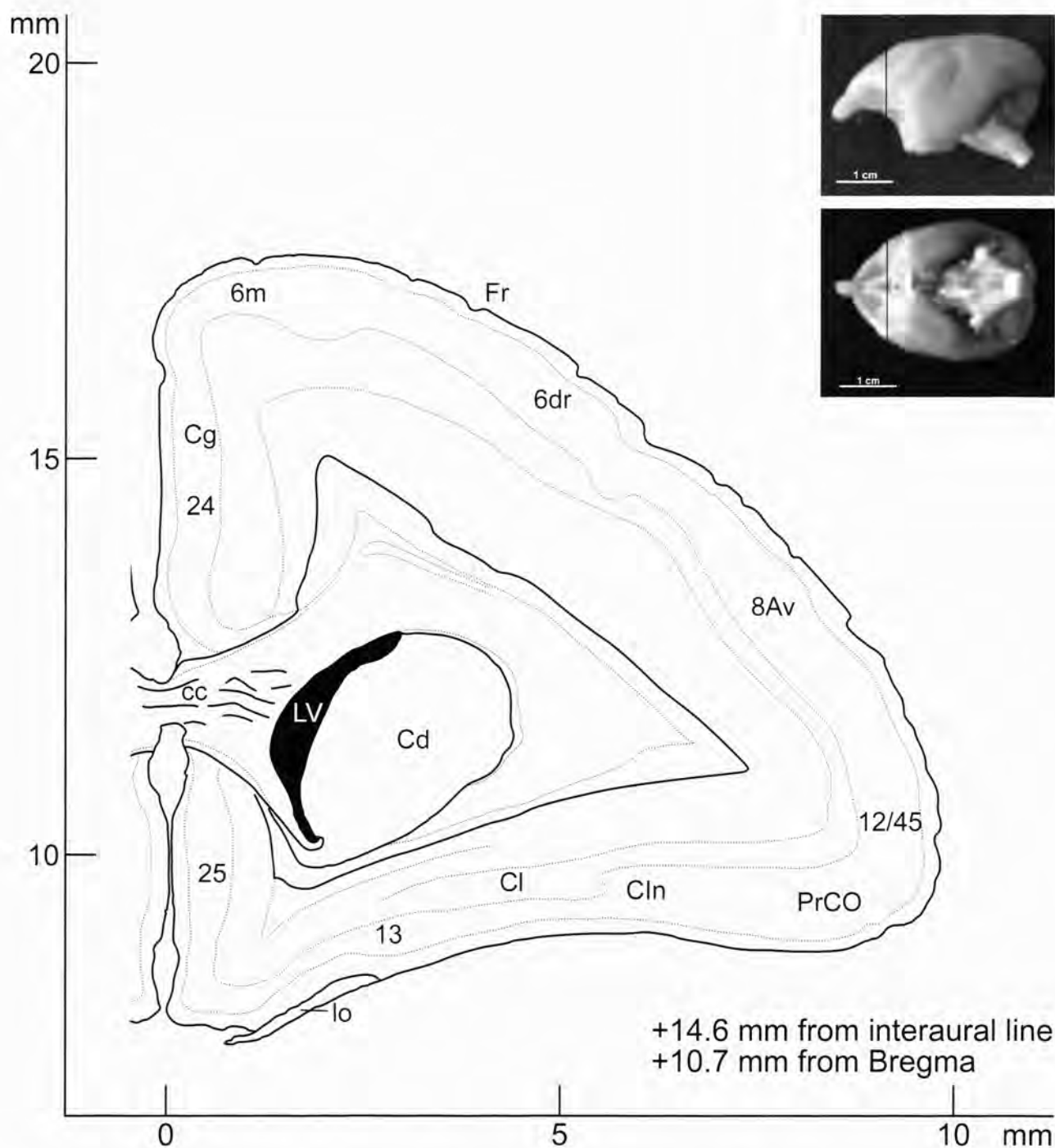
cTr-06



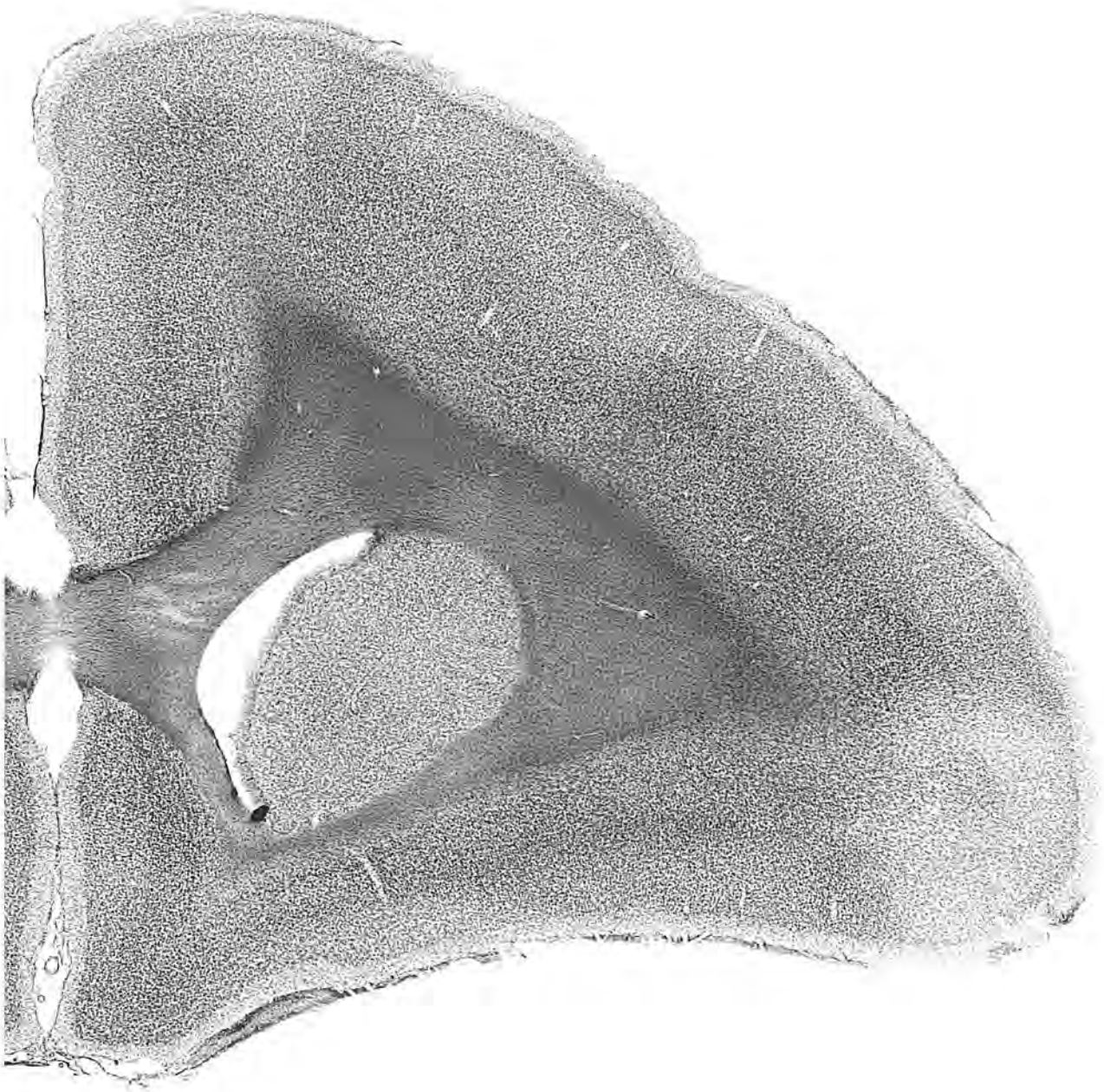
6dr, 6m, 8Av, 12/45, 13, 24, 25, 32, Brodmann's parcellation of the cortex; Cl, claustrum; Fr, frontal cortex; lo, lateral olfactory tract.

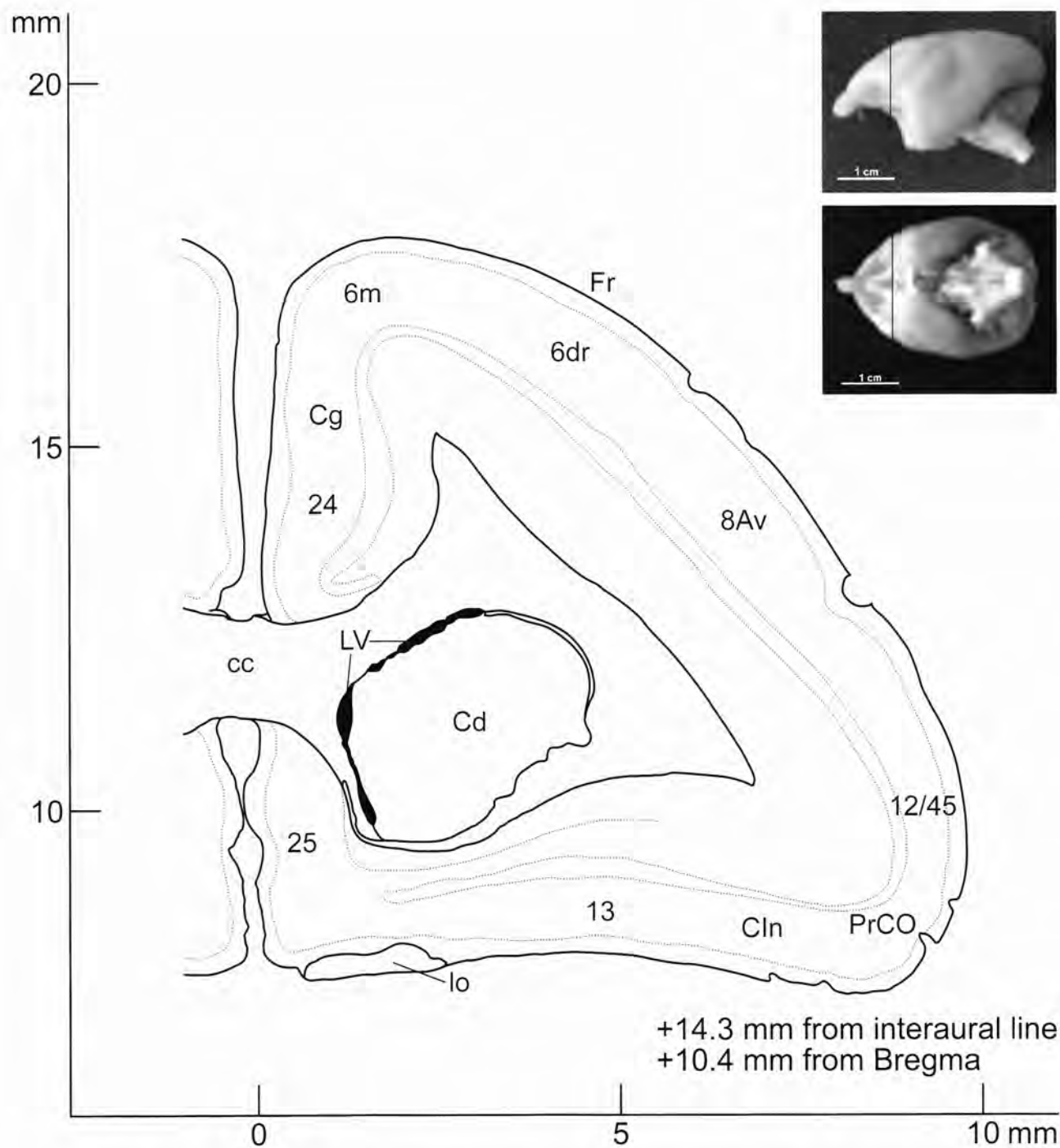


cTr-07



6dr, 6m, 8Av, 12/45, 13, 24, 25, Brodmann's parcellation of the cortex; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; Fr, frontal cortex; lo, lateral olfactory tract; LV, lateral ventricle; PrCO, precentral orbital area.

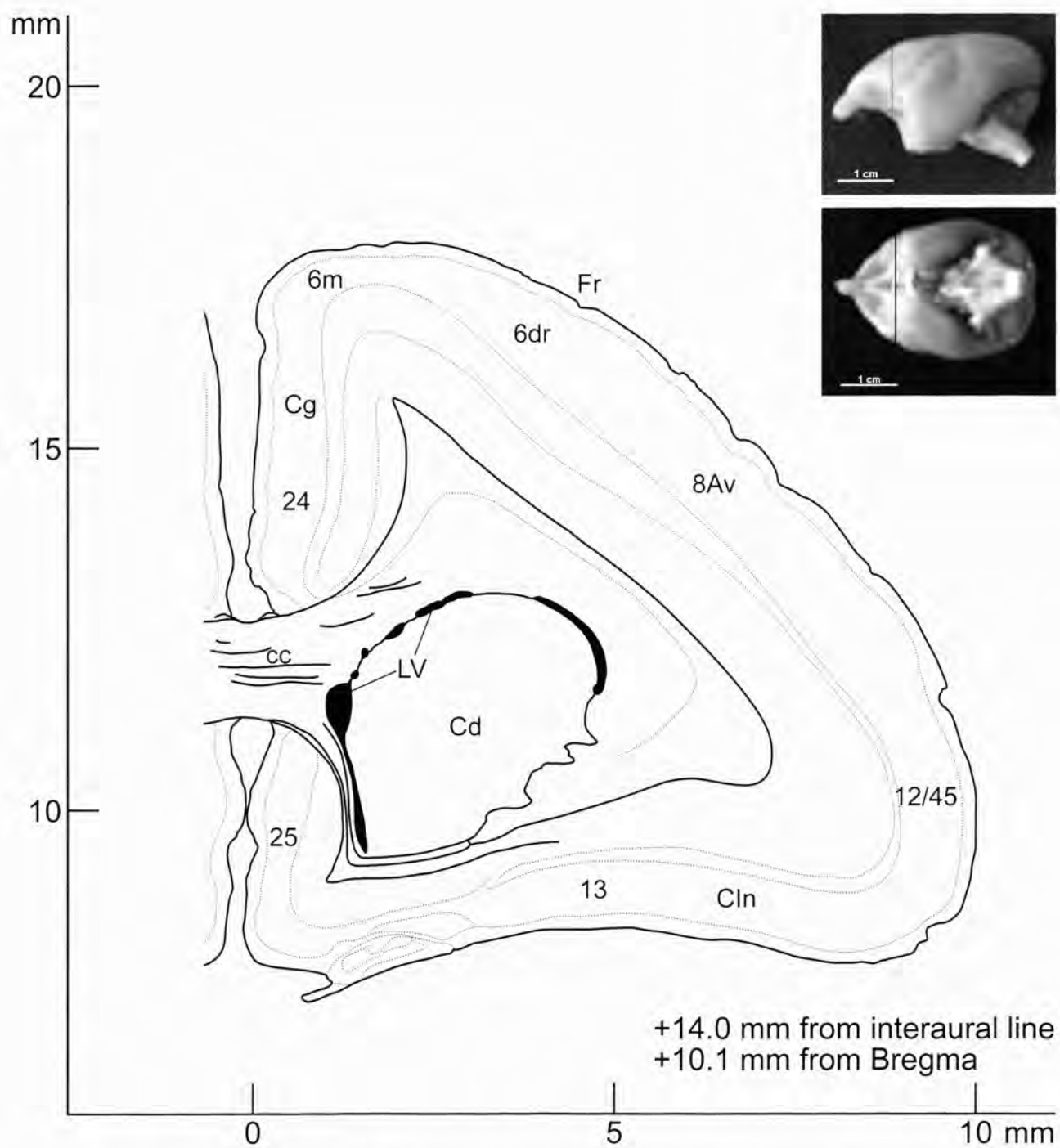




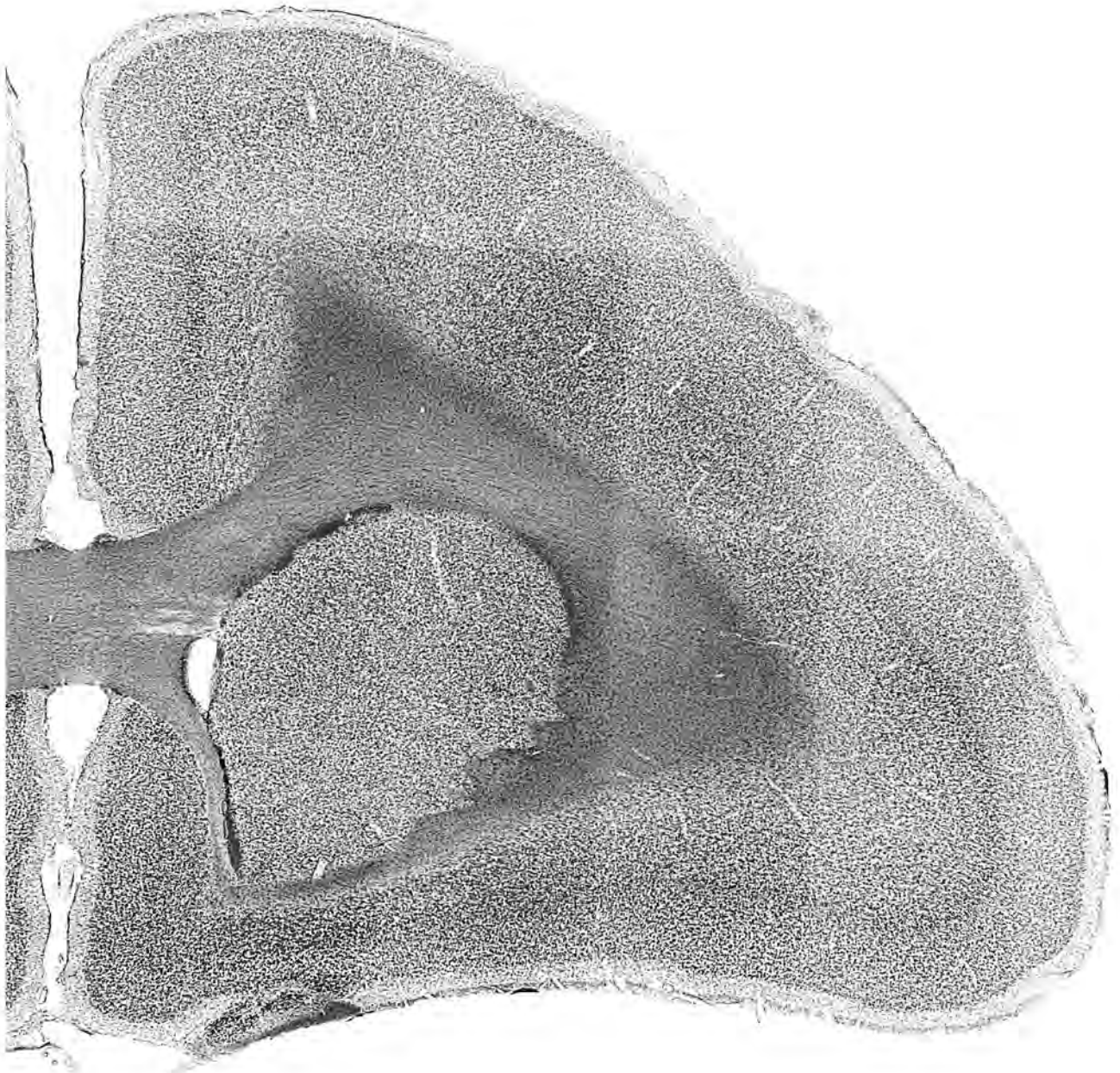
6dr, 6m, 8Av, 12/45, 13, 24, 25, Brodmann's parcellation of the cortex; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Fr, frontal cortex; lo, lateral olfactory tract; LV, lateral ventricle; PrCO, precentral orbital area.

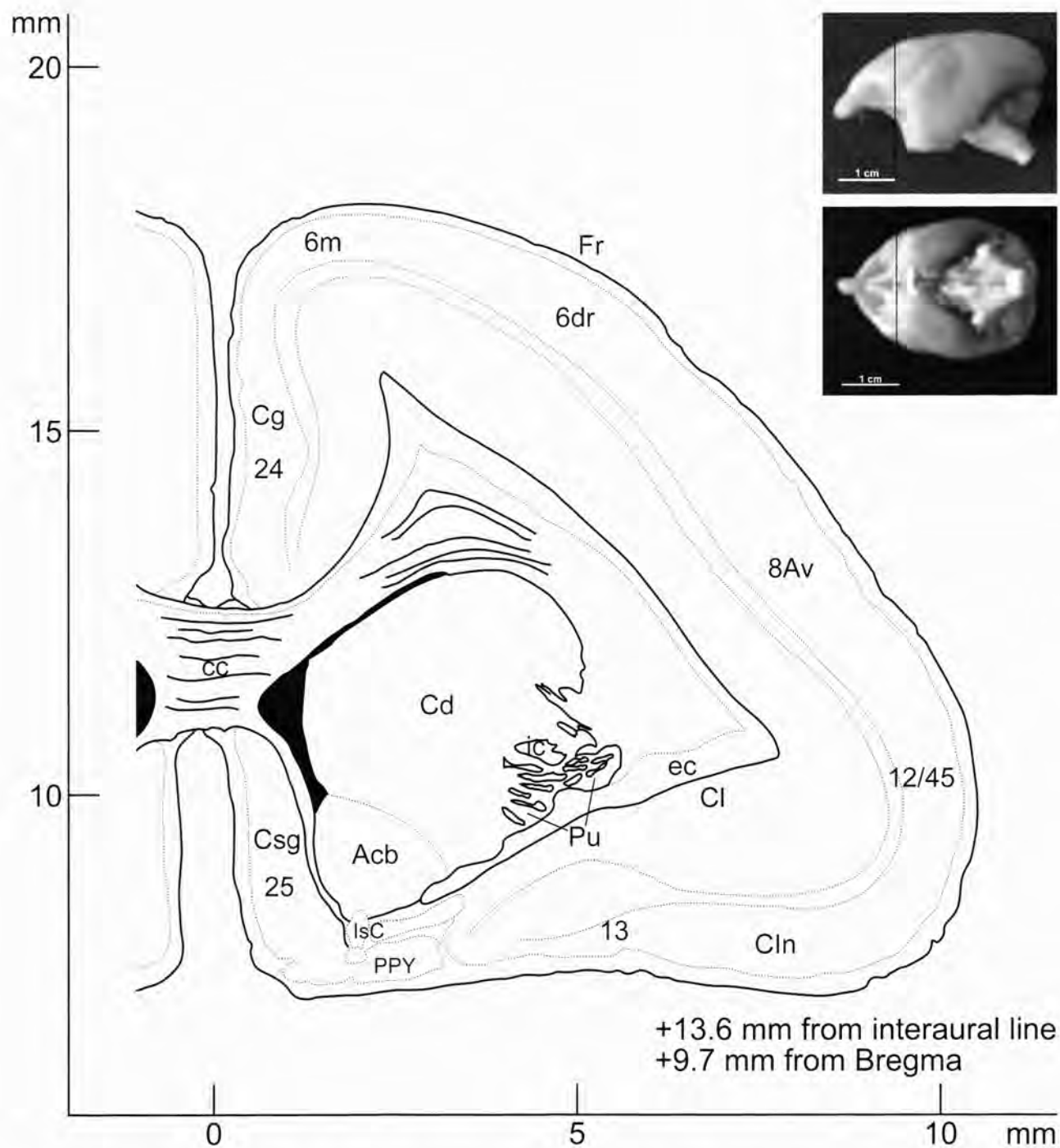


cTr-09



6dr, 6m, 8Av, 12/45, 13, 24, 25, Brodmann's parcellation of the cortex; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Fr, frontal cortex; LV, lateral ventricle.

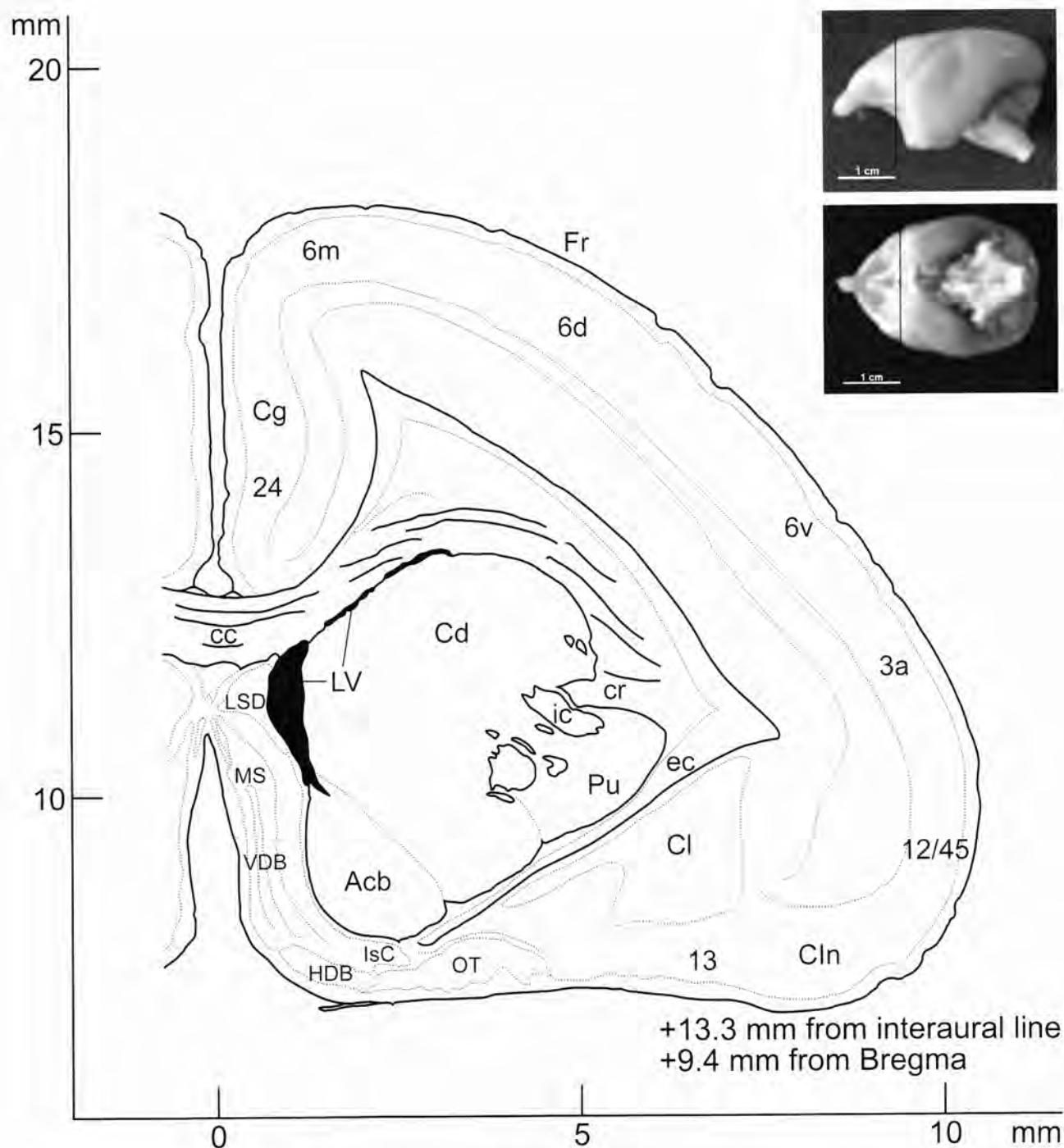




6dr, 6m, 8Av, 12/45, 13, 24, 25, Brodmann's parcellation of the cortex; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; CSG, cortex subgenualis; ec, external capsule; Fr, frontal cortex; ic, internal capsule; IsC, Island of Calleja; PPY, prepiriform cortex; Pu, Putamen.



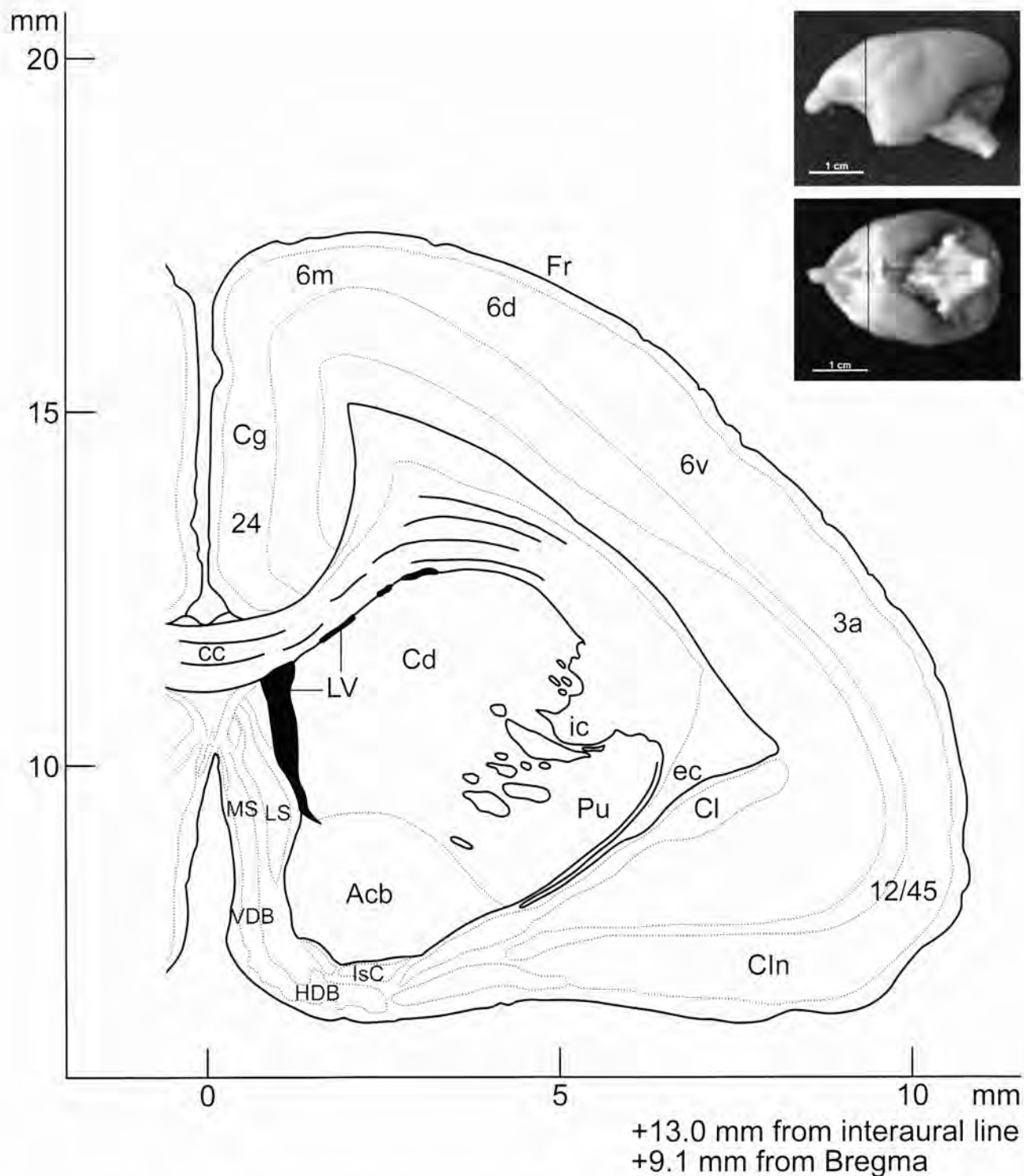
cTr-11



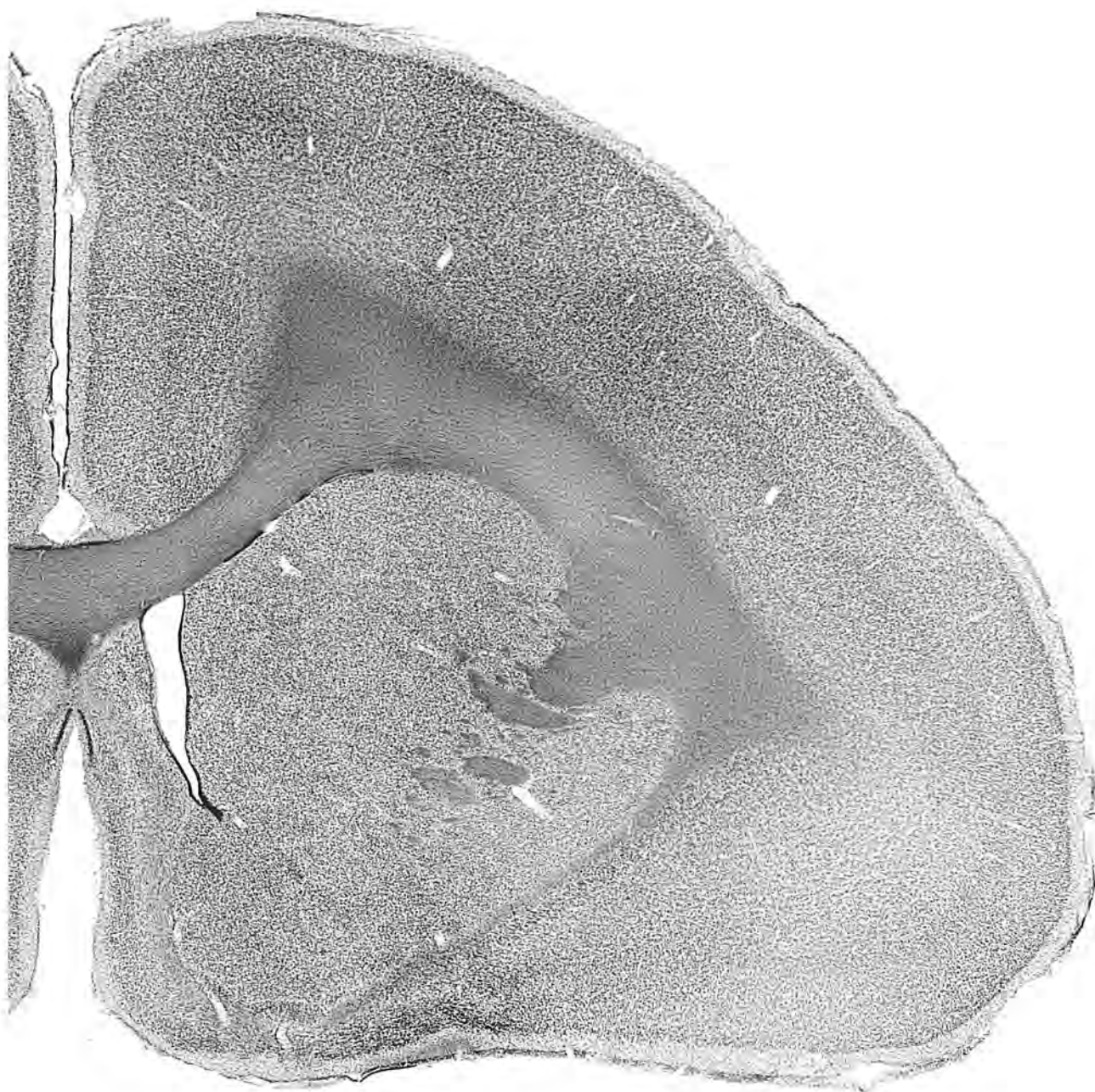
3a, 6d, 6m, 6v, 12/45, 13, 24, Brodmann's parcellation of the cortex; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; cr, corona radiata; ec, external capsule; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; IsC, Island of Calleja; LSD, lateral septal nucleus, dorsal part; LV, lateral ventricle; MS, medial septal nucleus; OT, olfactory tubercle; Pu, putamen; VDB, nucleus of the vertical limb of the diagonal band.



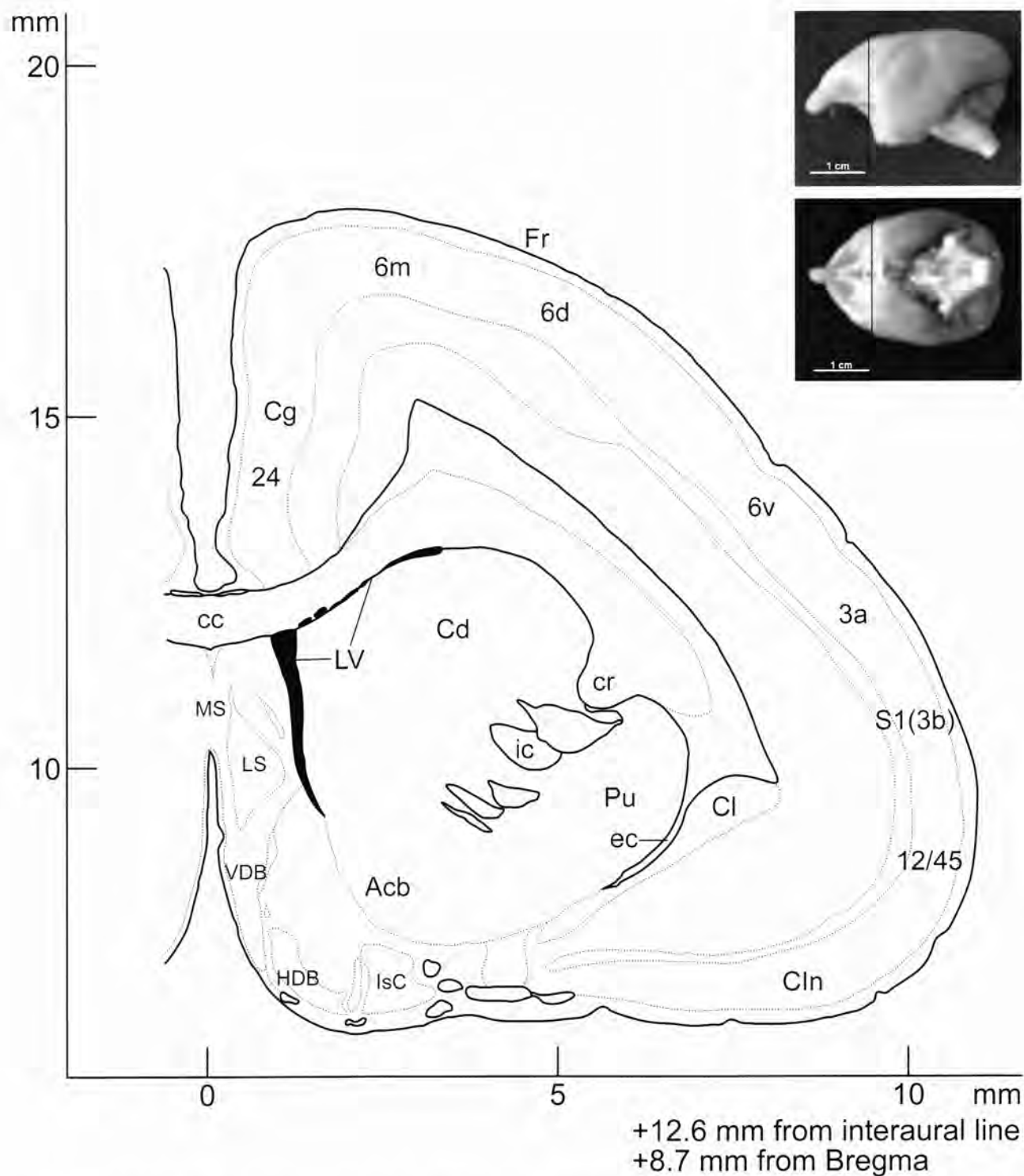
cTr-12



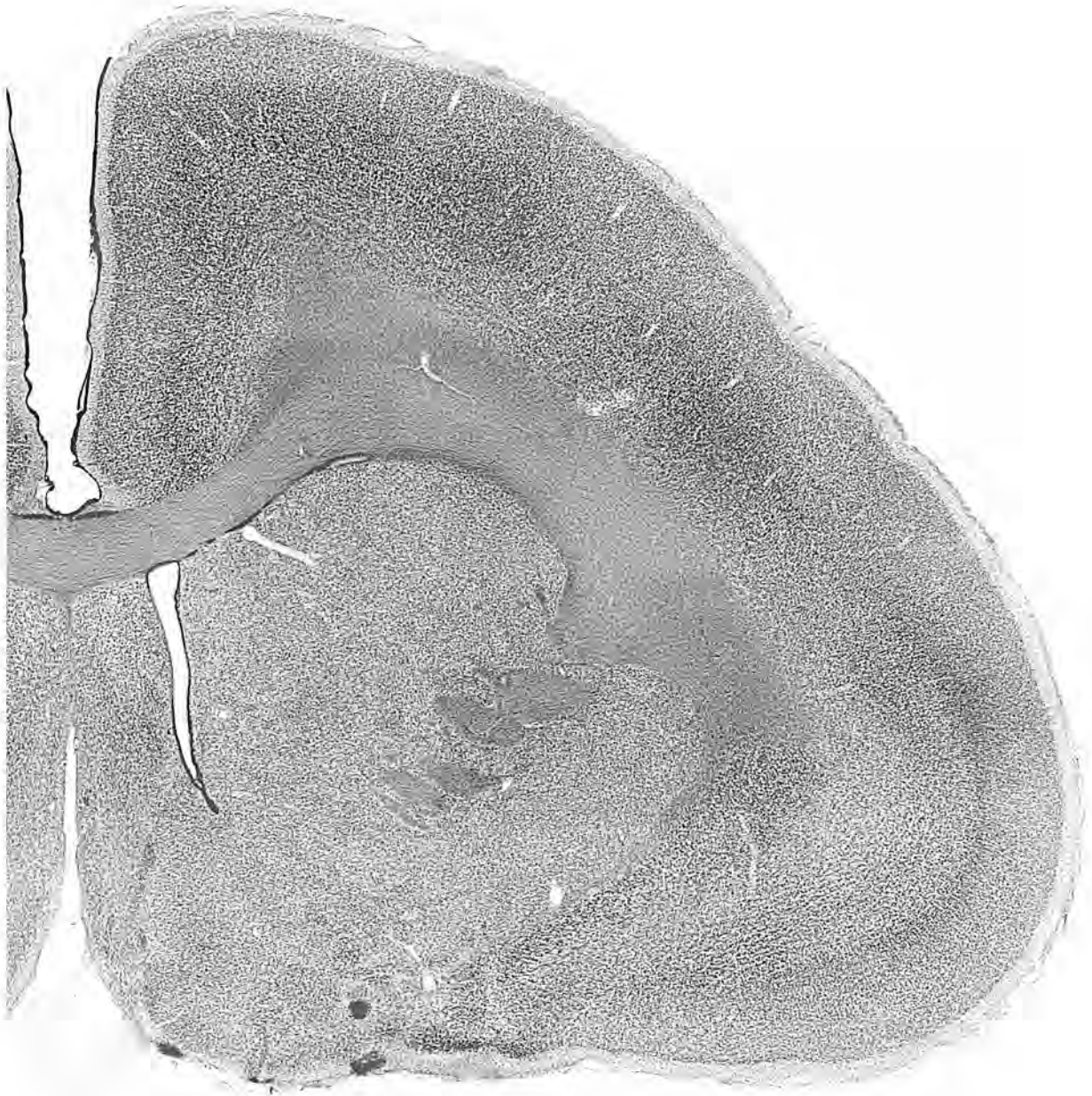
3a, 6d, 6m, 6v, 12/45, 24, Brodmann's parcellation of the cortex; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; ec, external capsule; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; IsC, Island of Calleja; LS, lateral septal nucleus; LV, lateral ventricle; MS, medial septal nucleus; Pu, putamen; VDB, nucleus of the vertical limb of the diagonal band.

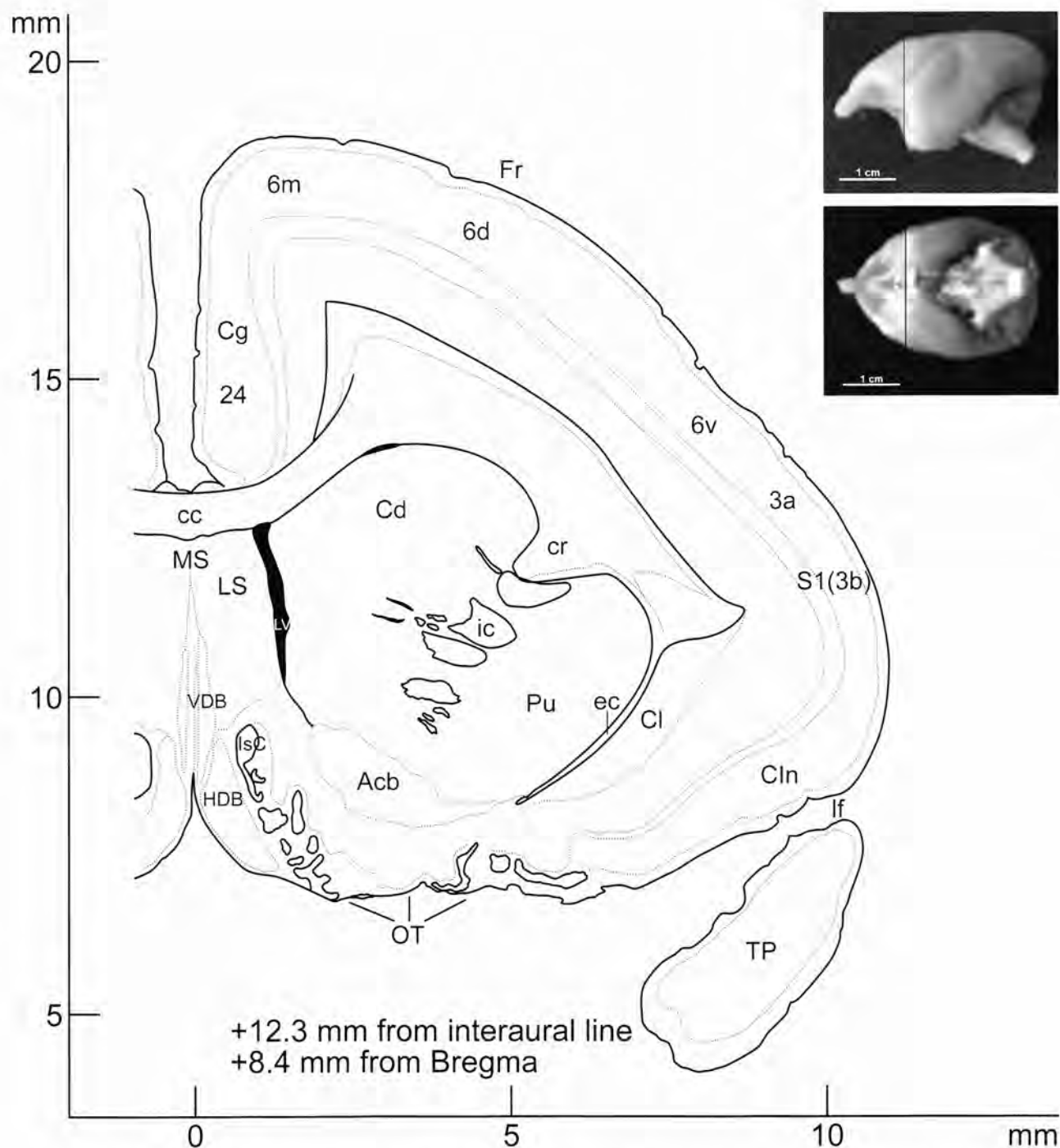


cTr-13



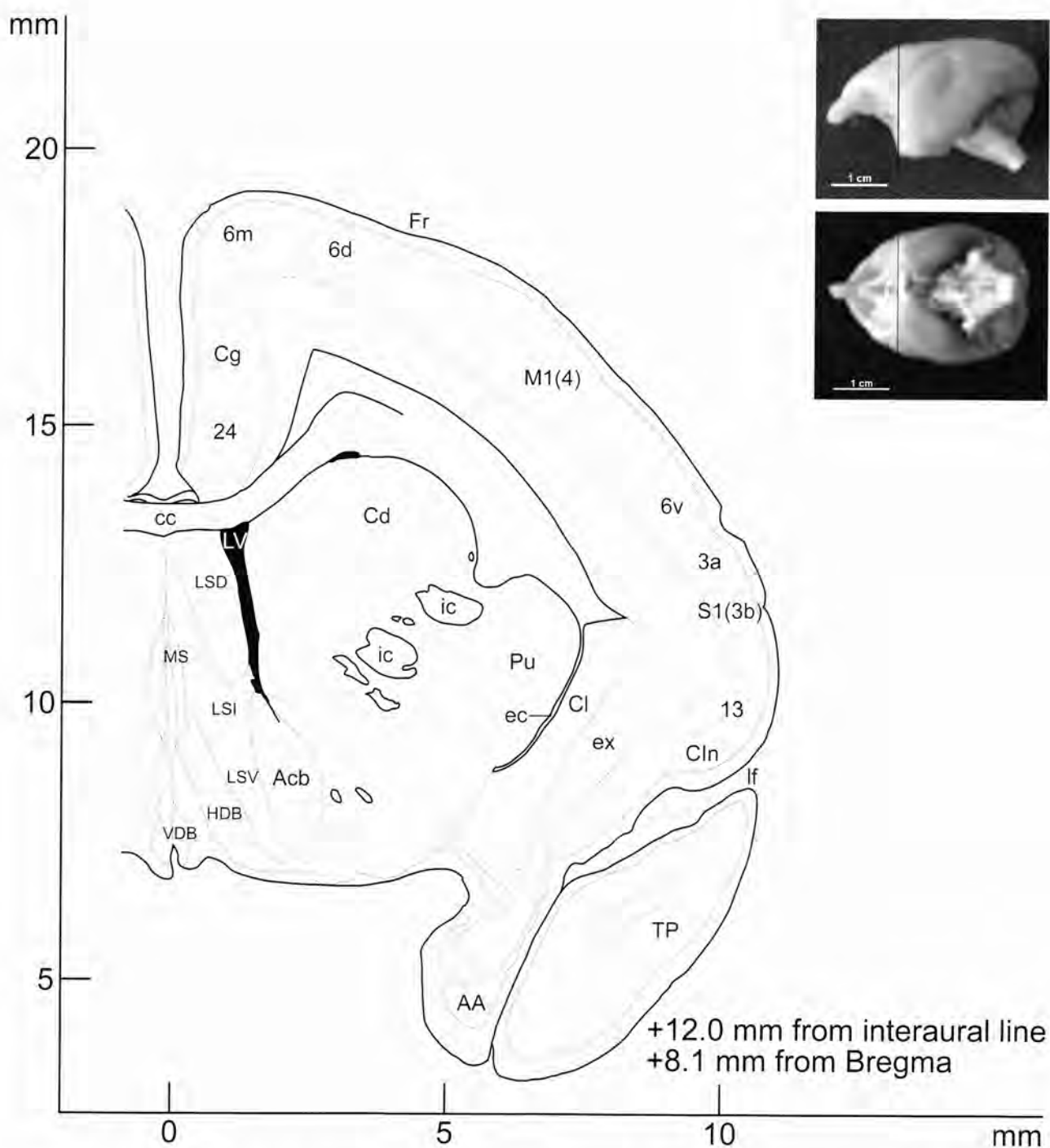
3a, 3b, 6d, 6m, 6v, 12/45, 24, Brodmann's parcellation of the cortex; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; cr, corona radiata; ec, external capsule; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; IsC, Island of Calleja; LS, lateral septal nucleus; LV, lateral ventricle; MS, medial septal nucleus; Pu, putamen; S1, primary somatosensory area; VDB, nucleus of the vertical limb of the diagonal band.



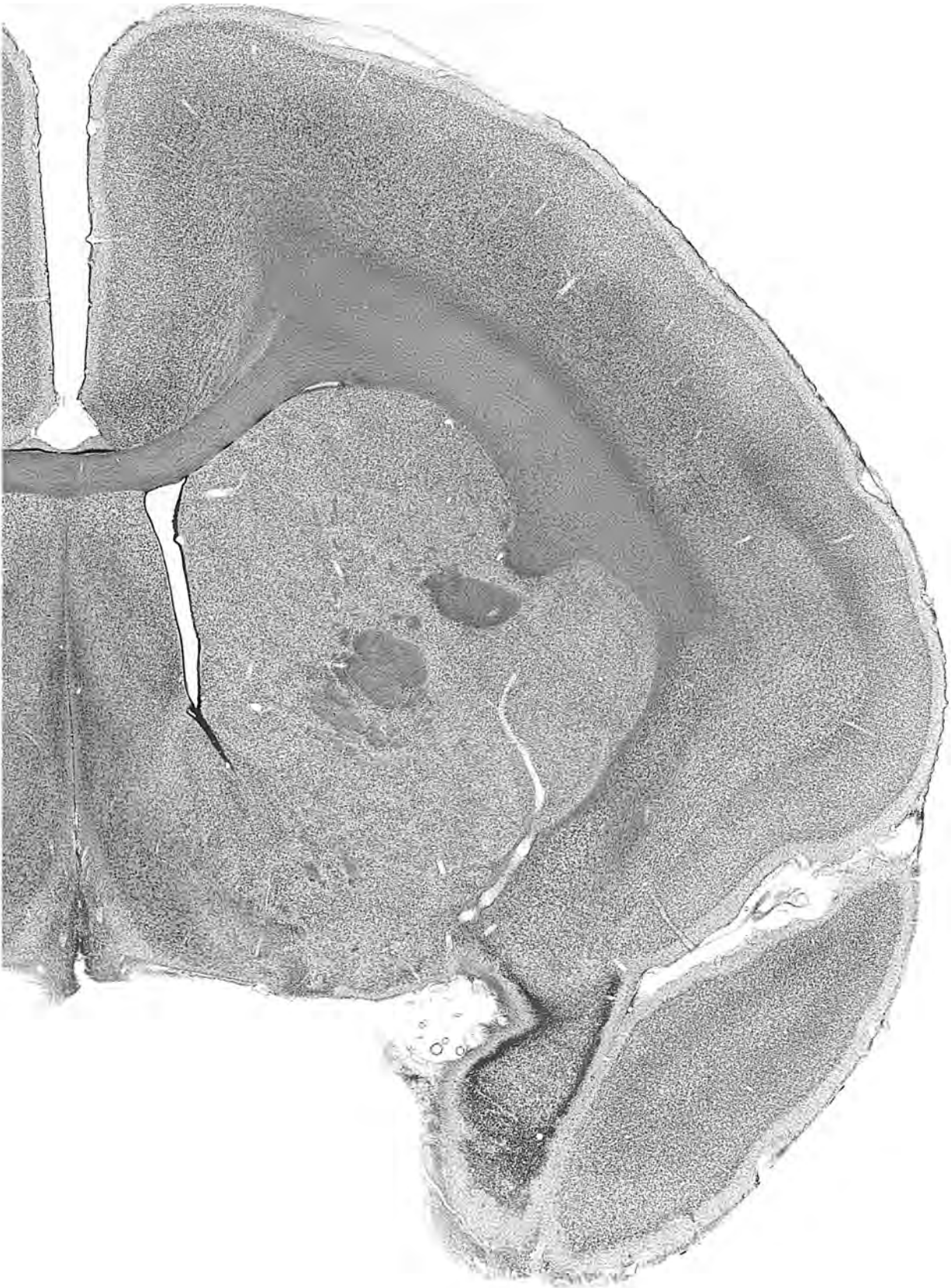


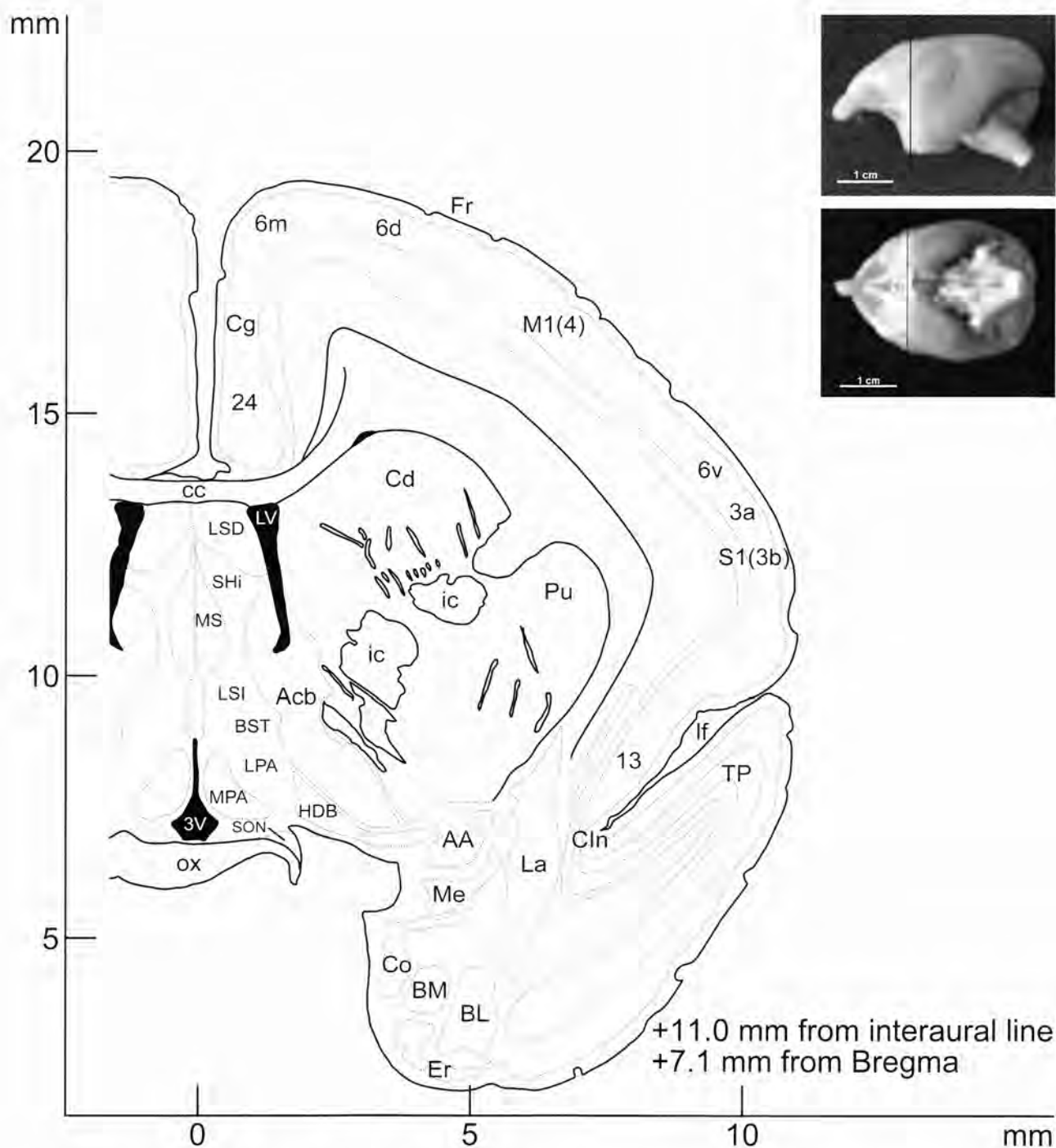
3a, 3b, 6d, 6m, 6v, 24, Brodmann's parcellation of the cortex; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; cr, corona radiata; ec, external capsule; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; IsC, Island of Calleja; If, lateral fissure; LS, lateral septal nucleus; LV, lateral ventricle; MS, medial septal nucleus; OT, olfactory tubercle; Pu, putamen; S1, primary somatosensory area; TP, temporal polar cortex; VDB, nucleus of the vertical limb of the diagonal band.



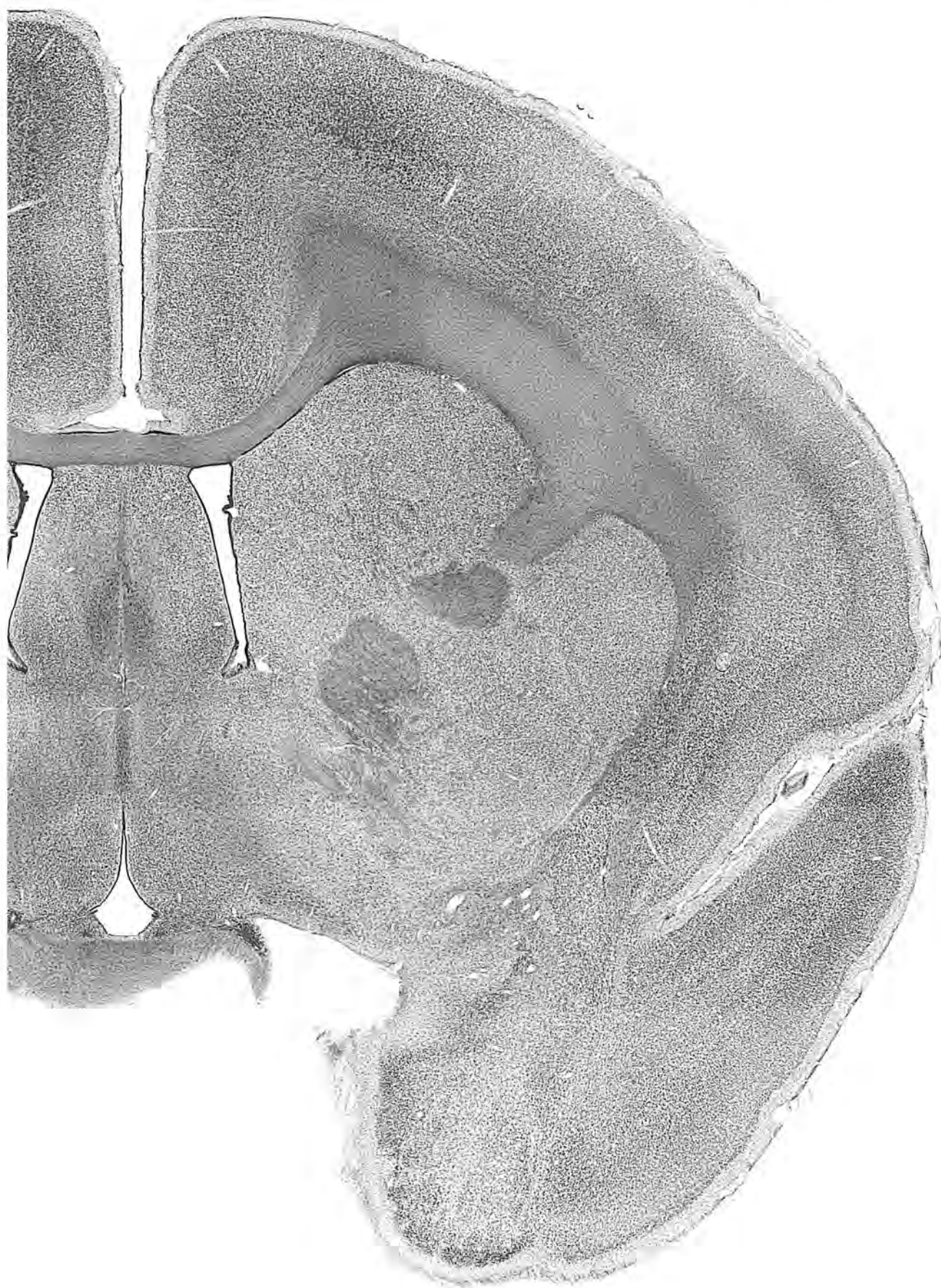


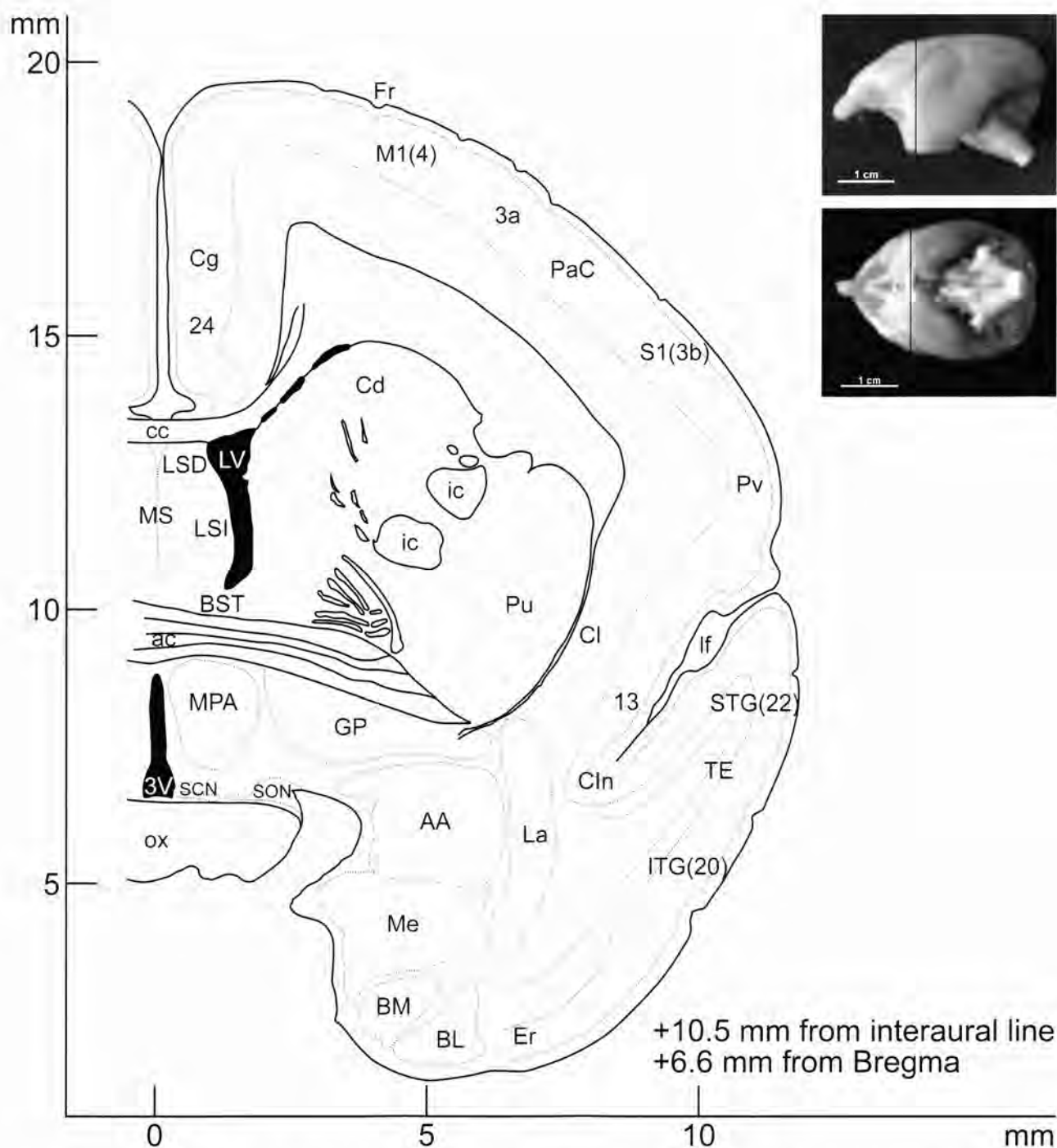
3a, 3b, 4, 6d, 6m, 6v, 13, 24, Brodmann's parcellation of the cortex; AA, anterior amygdaloid area; Acb, accumbens nucleus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; ec, external capsule; ex, extreme capsule; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; If, lateral fissure; LSD, lateral septal nucleus, dorsal part; LSI, lateral septal nucleus, intermediate part; LSV, lateral septal nucleus, ventral part; LV, lateral ventricle; M1, primary motor area; MS, medial septal nucleus; Pu, putamen; S1, primary somatosensory area; TP, temporal polar cortex; VDB, nucleus of the vertical limb of the diagonal band.





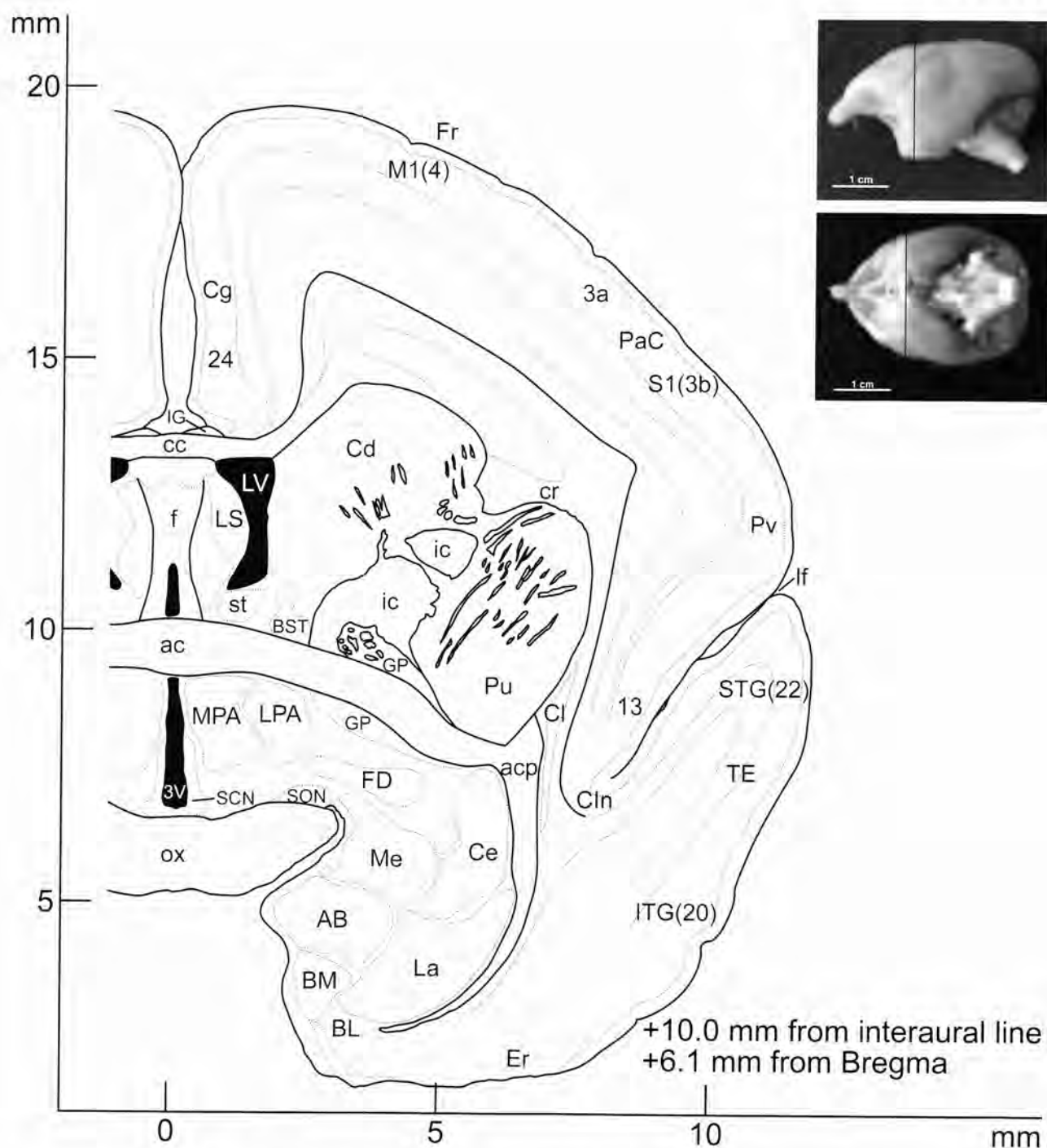
3a, 3b, 4, 6d, 6m, 6v, 13, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; AA, anterior amygdaloid area; Acb, accumbens nucleus; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; BST, bed nucleus of the stria terminalis; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CIn, insularis cortex; Co, cortical amygdaloid nucleus; Er, entorhinal cortex; Fr, frontal cortex; HDB, nucleus of the horizontal limb of the diagonal band; ic, internal capsule; If, lateral fissure; La, lateral amygdaloid nucleus; LPA, lateral preoptic area; LSD, lateral septal nucleus, dorsal part; LSI, lateral septal nucleus, intermediate part; LV, lateral ventricle; M1, primary motor area; Me, medial amygdaloid nucleus; MPA, medial preoptic area; MS, medial septal nucleus; ox, optic chiasm; Pu, putamen; S1, primary somatosensory area; SHi, septohippocampal nucleus; SON, supraoptic nucleus; TP, temporal polar cortex.





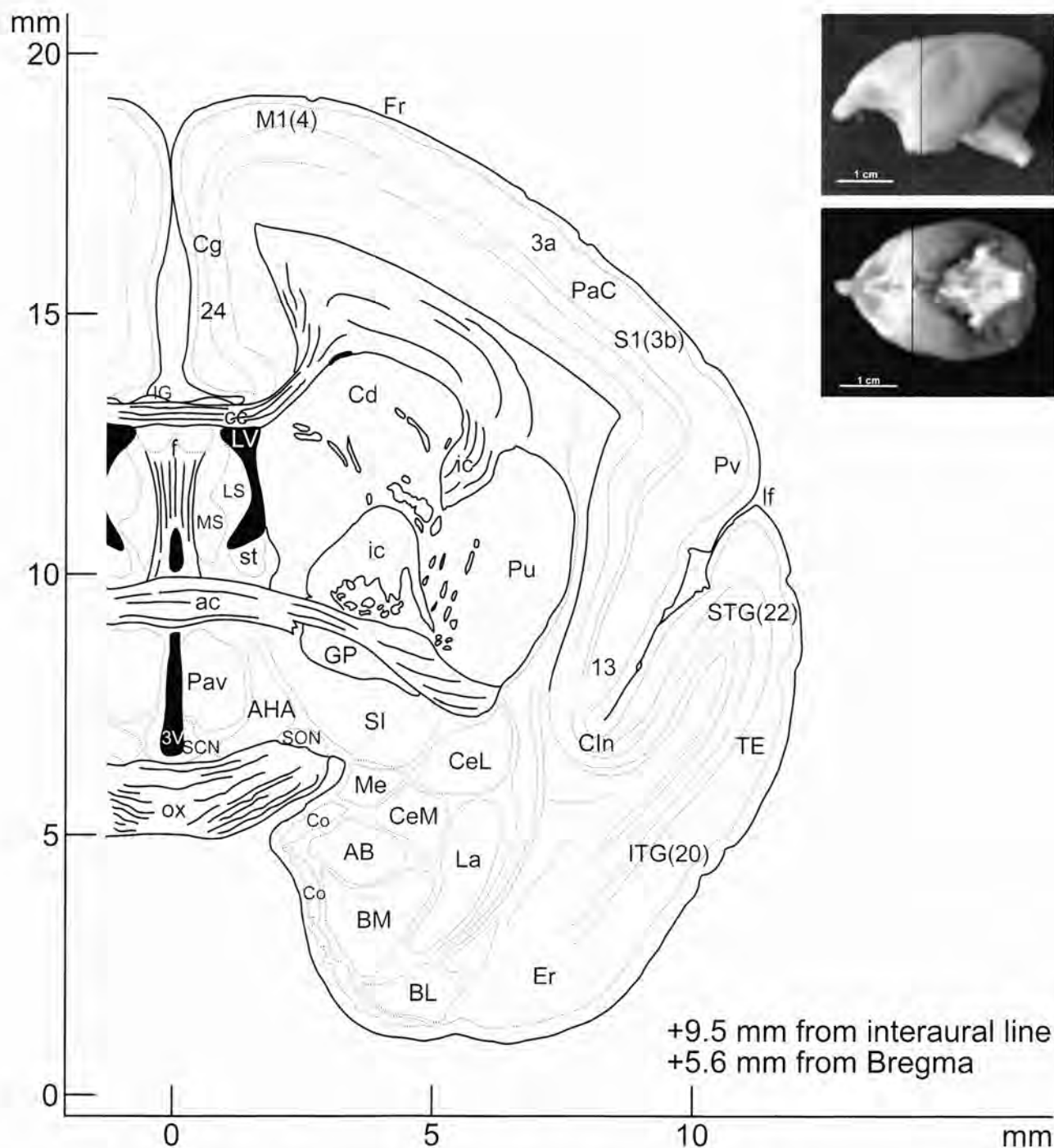
3a, 3b, 4, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; AA, anterior amygdaloid area; ac, anterior commissure; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; BST, bed nucleus of the stria terminalis; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CIn, insularis cortex; Cl, claustrum; Er, entorhinal cortex; Fr, frontal cortex; GP, globus pallidus; ic, internal capsule; ITG, infero-temporal gyrus; La, lateral amygdaloid nucleus; If, lateral fissure; LSD, lateral septal nucleus, dorsal part; LSI, lateral septal nucleus, intermediate part; LV, lateral ventricle; M1, primary motor area; Me, medial amygdaloid nucleus; MPA, medial preoptic area; MS, medial septal nucleus; ox, optic chiasm; PaC, parietal cortex; Pu, putamen; Pv, parietal ventral area; S1, primary somatosensory area; SCN, suprachiasmatic nucleus; SON, supraoptic nucleus; STG, superior temporal gyrus; TE, temporal cortex.



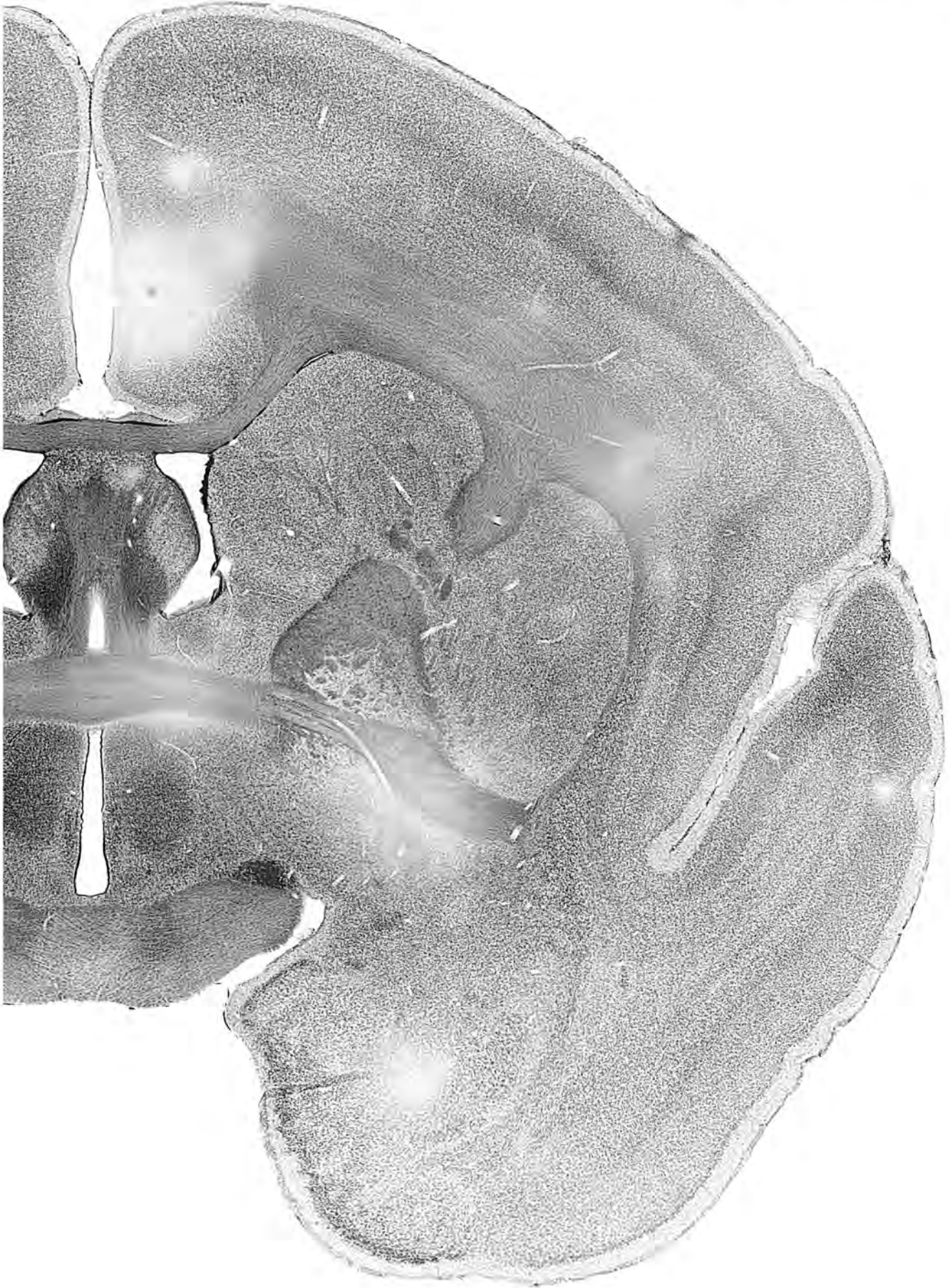


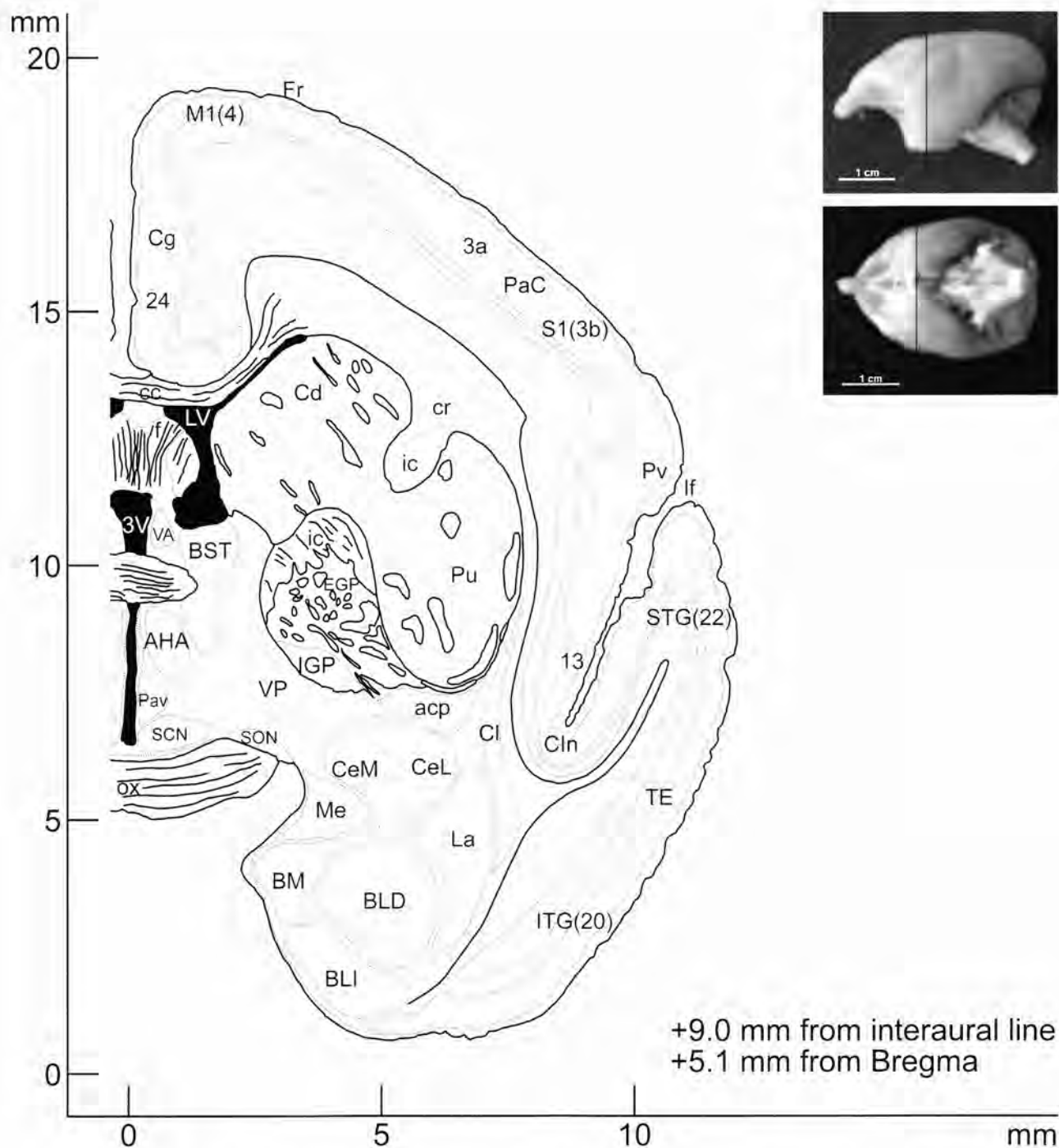
3a, 3b, 4, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; AB, accessory basal nucleus; ac, anterior commissure; acp, anterior commissure, posterior part; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; BST, bed nucleus of the stria terminalis; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; CIn, insular cortex; Cl, claustrum; cr, corona radiata; Er, entorhinal cortex; f, fornix; FD, nucleus fasciculus diagonalis; Fr, frontal cortex; GP, globus pallidus; ic, internal capsule; IG, indusium griseum; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; lf, lateral fissure; LPA, lateral preoptic area; LS, lateral septal nucleus; LV, lateral ventricle; M1, primary motor area; Me, medial amygdaloid nucleus; MPA, medial preoptic area; ox, optic chiasm; PaC, parietal cortex; Pu, putamen; Pv, parietal ventral area; S1, primary somatosensory area; SCN, suprachiasmatic nucleus; SON, supraoptic nucleus; st, stria terminalis; STG, superior temporal gyrus; TE, temporal cortex.



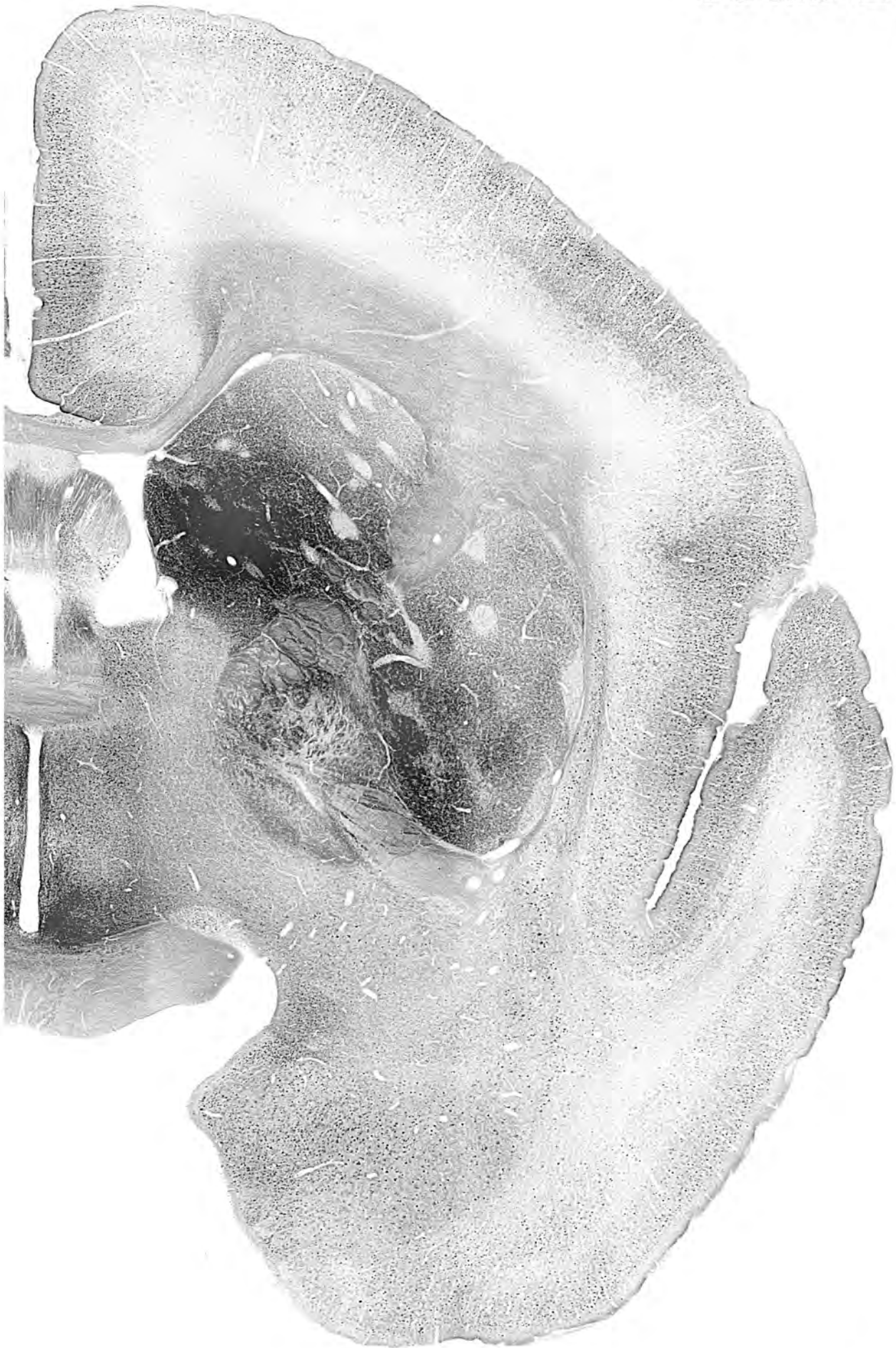


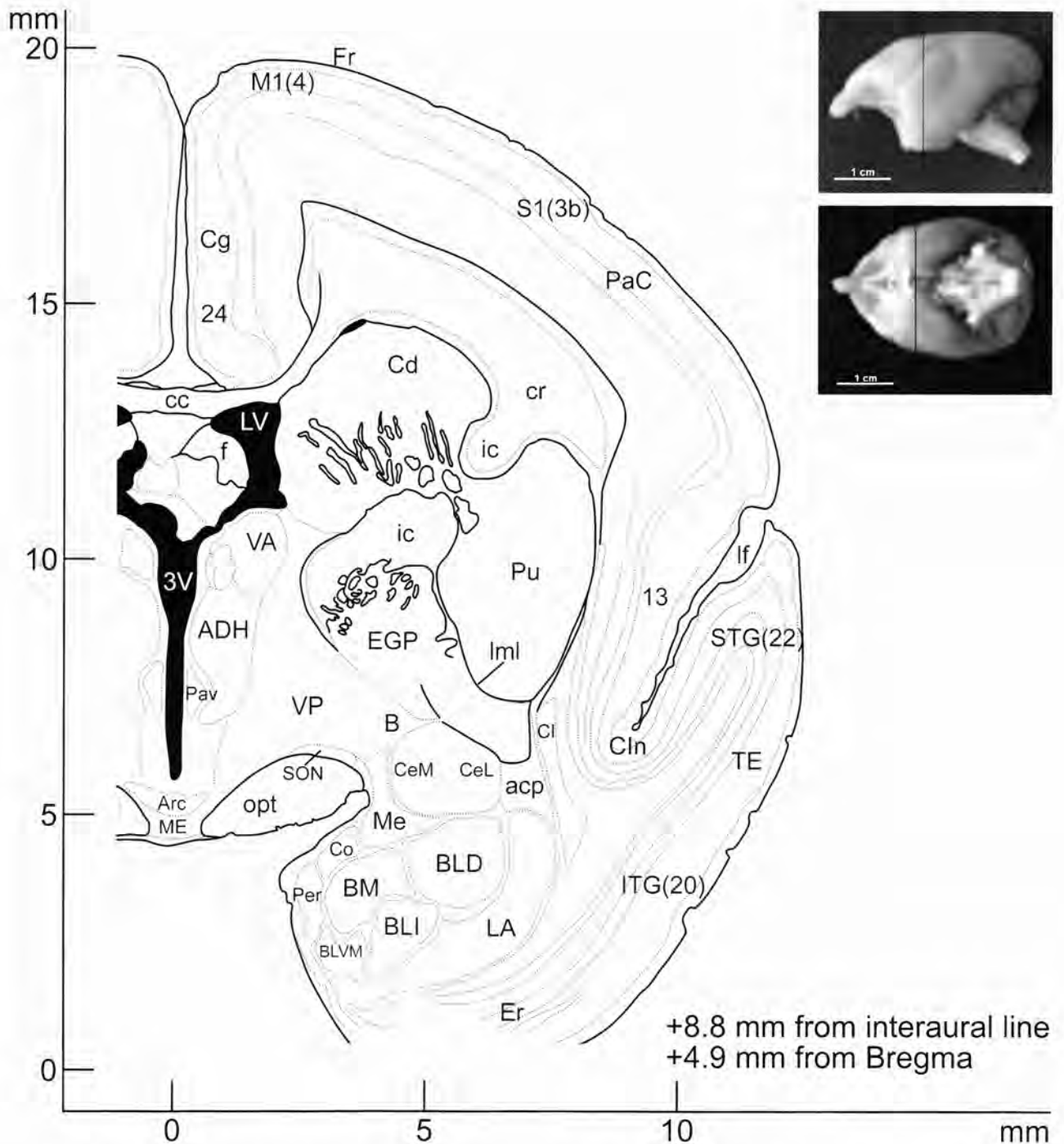
3a, 3b, 4, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; AB, accessory basal nucleus; ac, anterior commissure; AHA, anterior hypothalamic area; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; CeM, central amygdaloid nucleus, medial division; Cg, cingulate cortex; Cln, insularis cortex; Co, cortical amygdaloid nucleus; Er, entorhinal cortex; f, fornix; Fr, frontal cortex; GP, globus pallidus; ic, internal capsule; IG, indusium griseum; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; lf, lateral fissure; LS, lateral septal nucleus; LV, lateral ventricle; M1, primary motor area; Me, medial amygdaloid nucleus; MS, medial septal nucleus; ox, optic chiasm; PaC, parietal cortex; Pav, paraventricular hypothalamic nucleus; Pu, putamen; Pv, parietal ventral area; S1, primary somatosensory area; SCN, suprachiasmatic nucleus; SI, substantia innominata; SON, supraoptic nucleus; st, stria terminalis; STG, superior temporal gyrus; TE, temporal cortex.





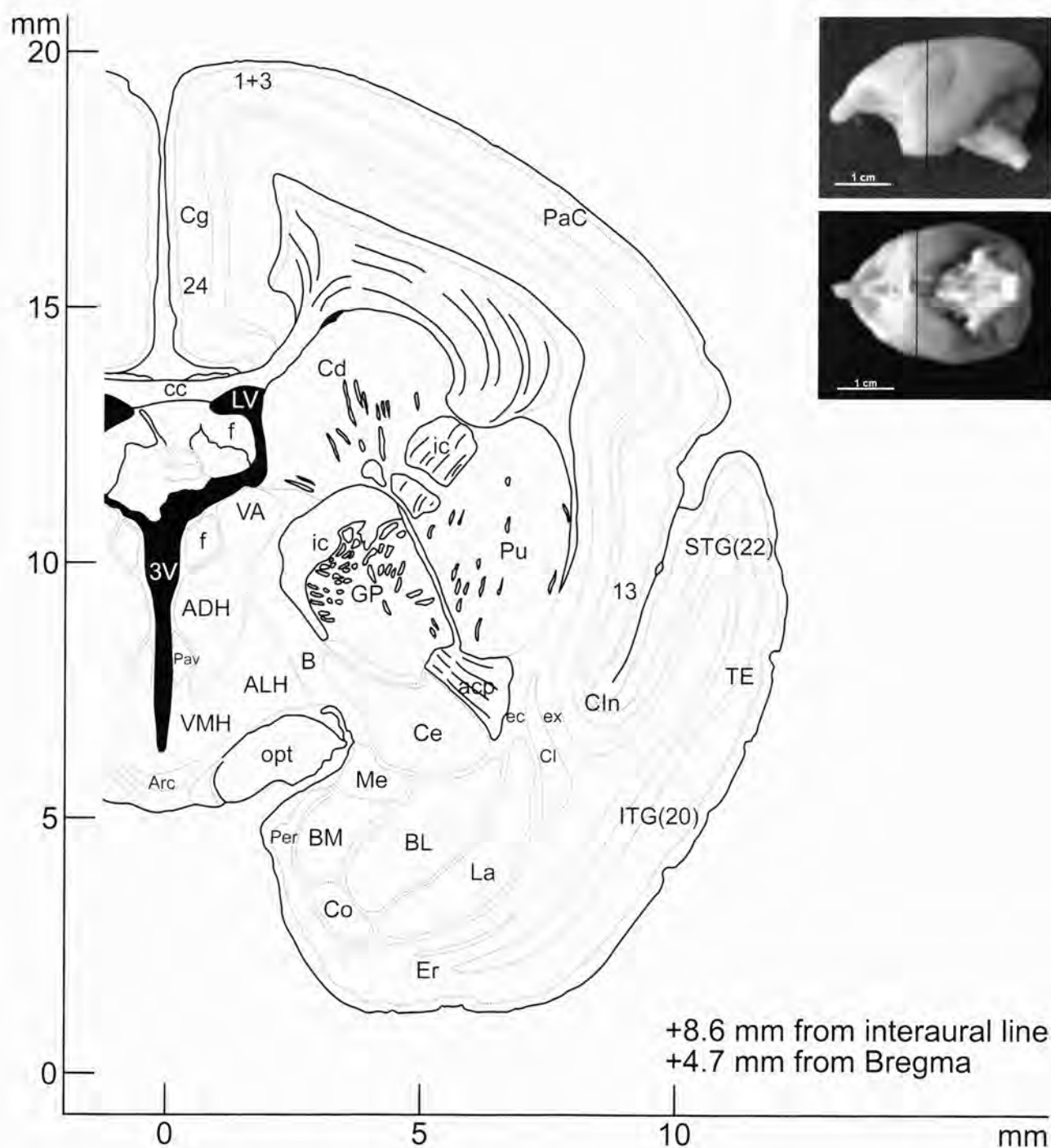
3a, 3b, 4, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; aCP, anterior commissure, posterior part; AHA, anterior hypothalamic area; BLD, basolateral amygdaloid nucleus, dorsal part; BLI, basolateral amygdaloid nucleus, intermediate part; BM, basomedial amygdaloid nucleus; BST, bed nucleus of the stria terminalis; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; CeM, central amygdaloid nucleus, medial division; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; cr, corona radiata; EGP, external globus pallidus; f, fornix; Fr, frontal cortex; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; If, lateral fissure; LV, lateral ventricle; M1, primary motor area; Me, medial amygdaloid nucleus; ox, optic chiasm; PaC, parietal cortex; Pav, paraventricular hypothalamic nucleus; Pu, putamen; Pv, parietal ventral area; S1, primary somatosensory area; SCN, suprachiasmatic nucleus; SON, supraoptic nucleus; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VP, ventral pallidum.



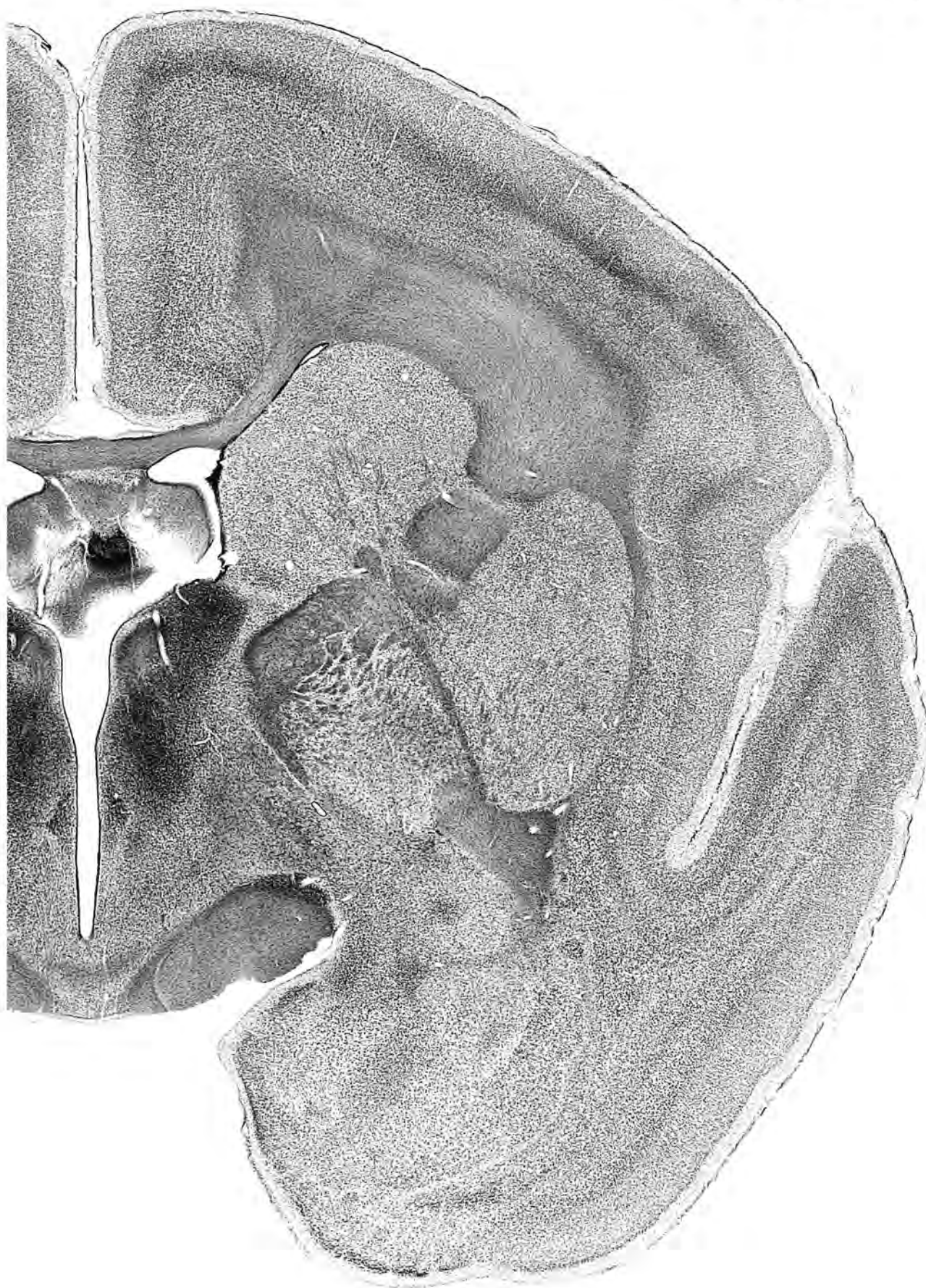


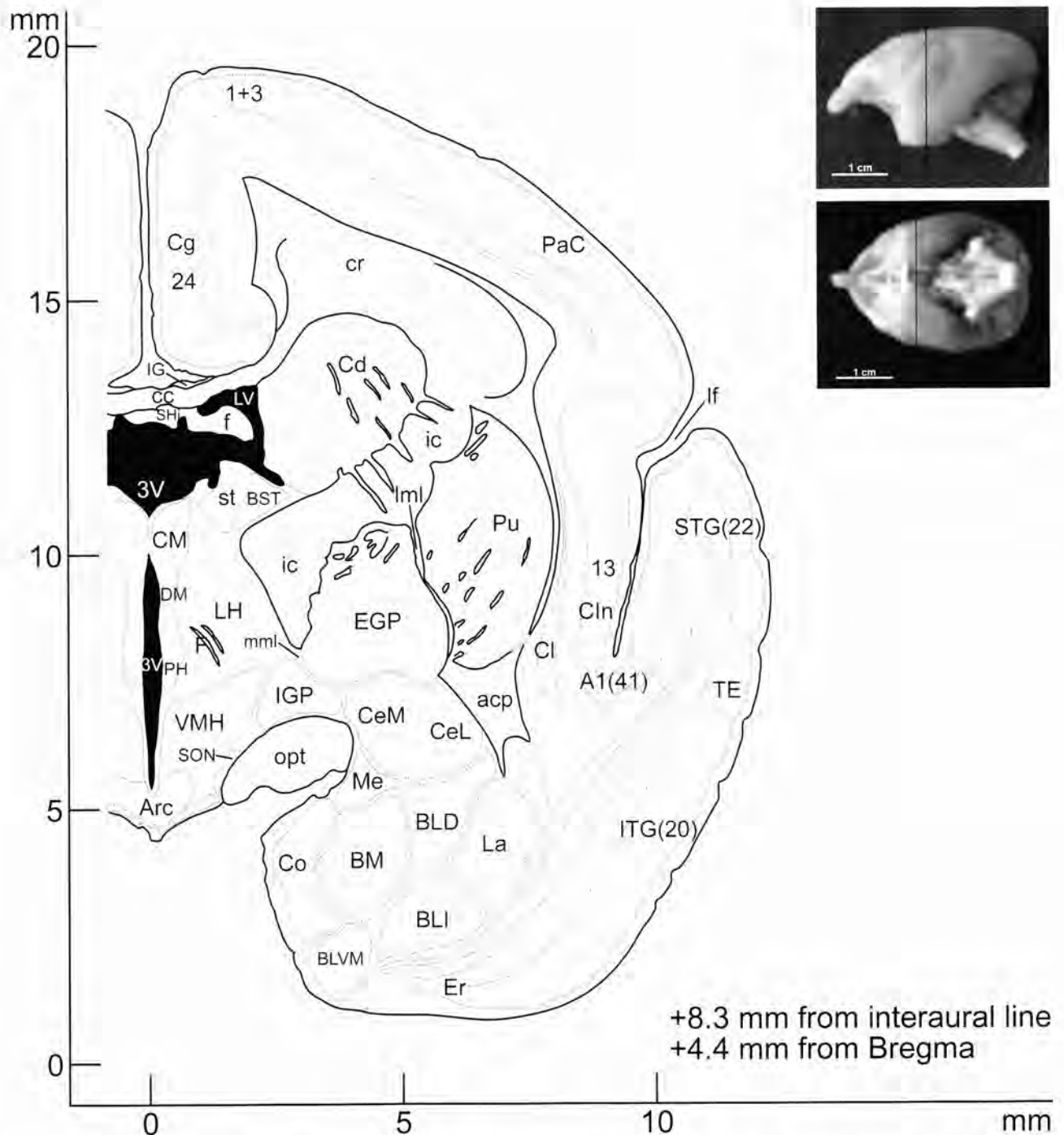
3b, 4, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; acp, anterior commissure, posterior part; ADH, dorsal hypothalamic area; Arc, arcuate hypothalamic nucleus; B, basal nucleus (Meynert); BLD, basolateral amygdaloid nucleus, dorsal part; BLI, basolateral amygdaloid nucleus, intermediate part; BLVM, basolateral amygdaloid nucleus, ventromedial part; BM, basomedial amygdaloid nucleus; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; CeM, central amygdaloid nucleus, medial division; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; Co, cortical amygdaloid nucleus; cr, corona radiata; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; Fr, frontal cortex; ic, internal capsule; ITG, infero-temporal gyrus; La, lateral amygdaloid nucleus; lf, lateral fissure; lml, lateral medullary lamina; LV, lateral ventricle; M1, primary motor area; ME, median eminence; Me, medial amygdaloid nucleus; opt, optic tract; PaC, parietal cortex; Pav, paraventricular hypothalamic nucleus; Per, periamygdaloid nucleus; Pu, putamen; S1, primary somatosensory area; SON, supraoptic nucleus; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VP, ventral pallidum.



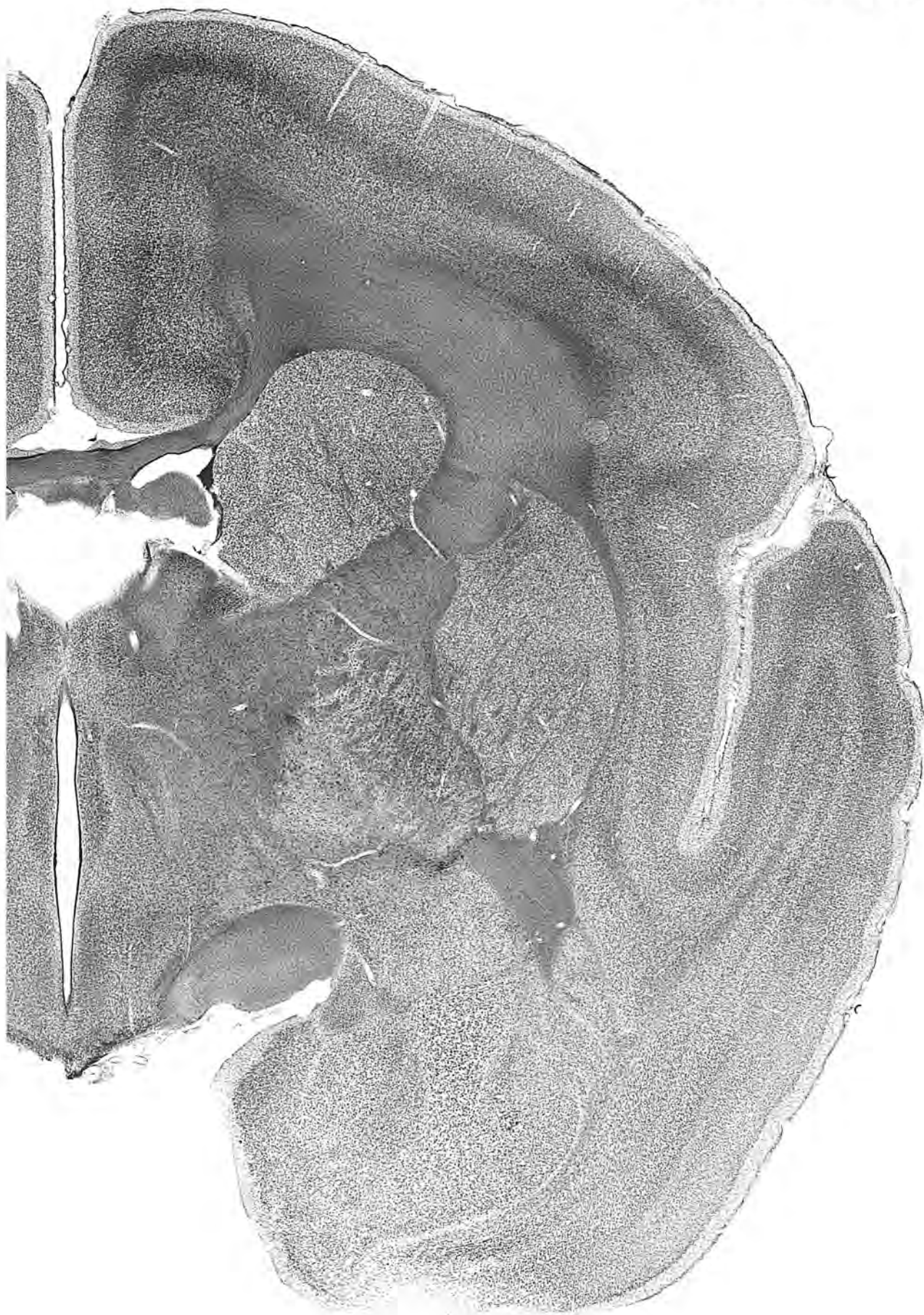


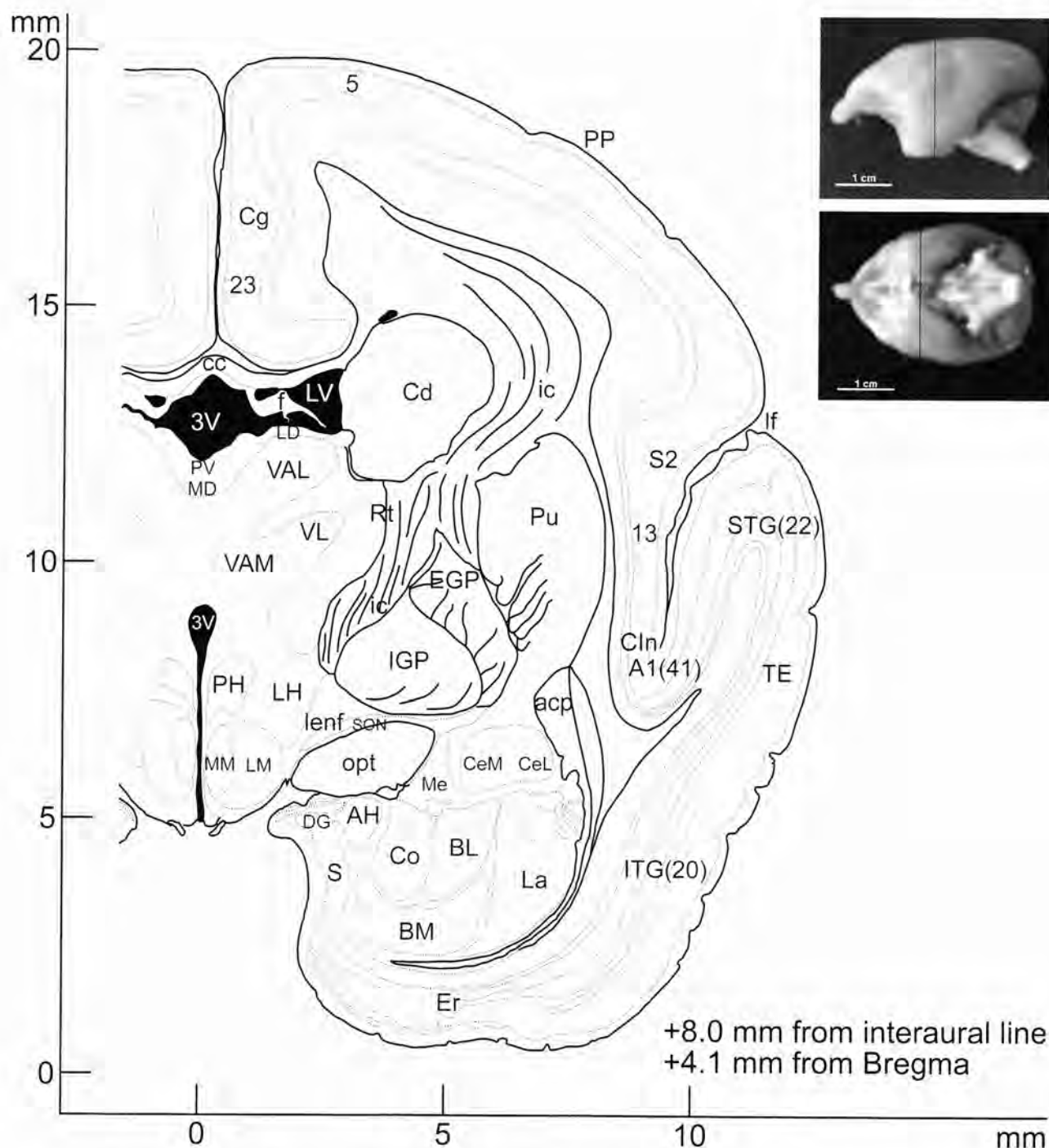
1+3, 13, 20, 22, 24, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; acp, anterior commissure, posterior part; ADH, dorsal hypothalamic area; ALH, lateral hypothalamic area; Arc, arcuate hypothalamic nucleus; B, basal nucleus (Meynert); BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; Co, cortical amygdaloid nucleus; ec, external capsule; Er, entorhinal cortex; ex, extreme capsule; f, fornix; GP, globus pallidus; ic, internal capsule; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LV, lateral ventricle; Me, medial amygdaloid nucleus; opt, optic tract; Pav, paraventricular hypothalamic nucleus; Pac, parietal cortex; Per, periamygdaloid nucleus; Pu, putamen; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VMH, ventromedial hypothalamic nucleus.





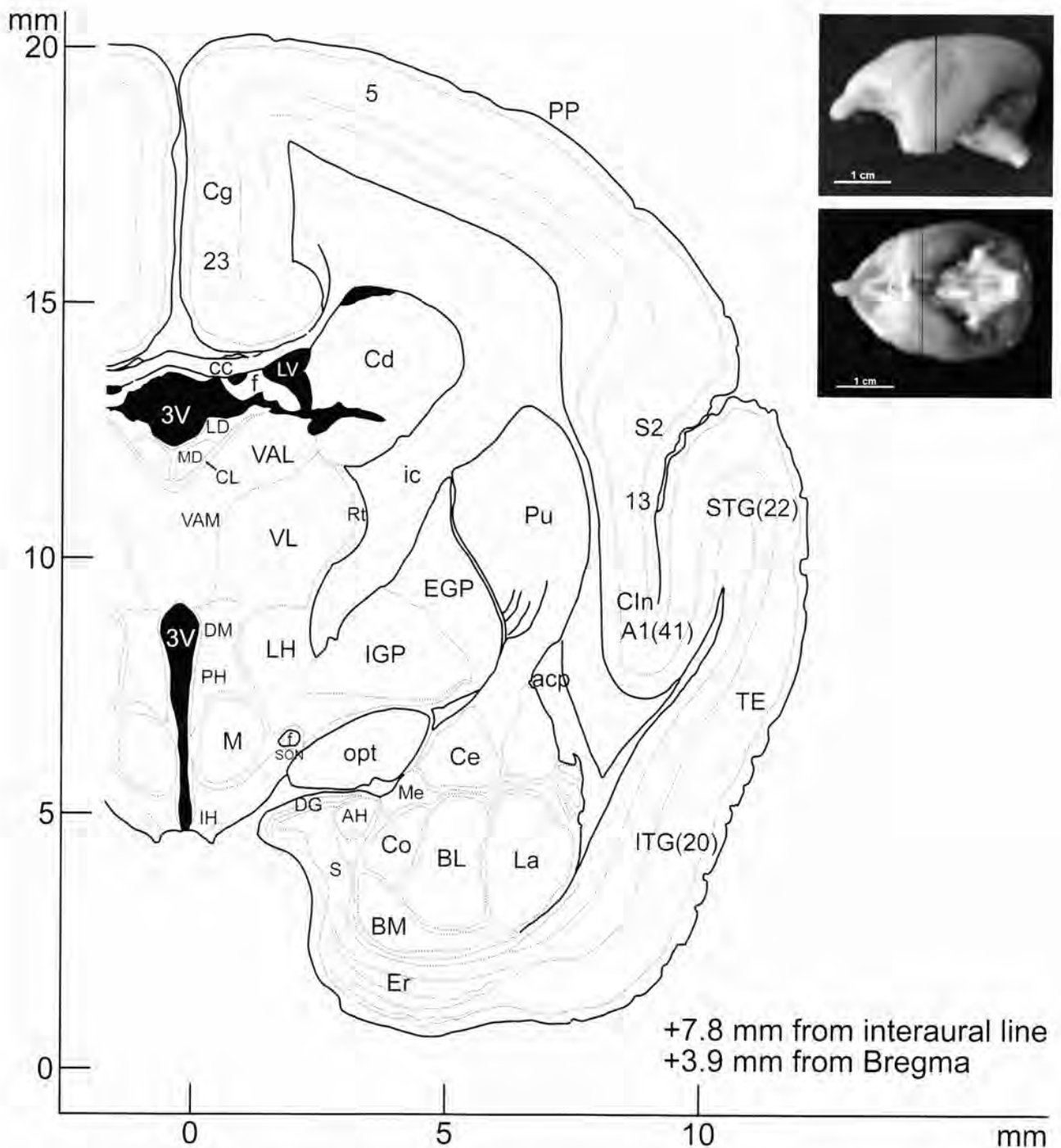
1+3, 13, 20, 22, 24, 41, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; acp, anterior commissure, posterior part; Arc, arcuate hypothalamic nucleus; BLD, basolateral amygdaloid nucleus, dorsal part; BLI, basolateral amygdaloid nucleus, intermediate part; BLVM, basolateral amygdaloid nucleus, ventromedial part; BM, basomedial amygdaloid nucleus; BST, bed nucleus of the stria terminalis; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; CeM, central amygdaloid nucleus, medial division; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; CM, central medial thalamic nucleus; Co, cortical amygdaloid nucleus; cr, corona radiata; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IG, indusium griseum; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; lf, lateral fissure; LH, lateral hypothalamic area; lml, lateral medullary lamina; LV, lateral ventricle; Me, medial amygdaloid nucleus; mml, medial medullary lamina; opt, optic tract; PaC, parietal cortex; PH, posterior hypothalamic area; Pu, putamen; SHi, septohippocampal nucleus; SON, supraoptic nucleus; st, stria terminalis; STG, superior temporal gyrus; TE, temporal cortex; VMH, ventromedial hypothalamic nucleus.



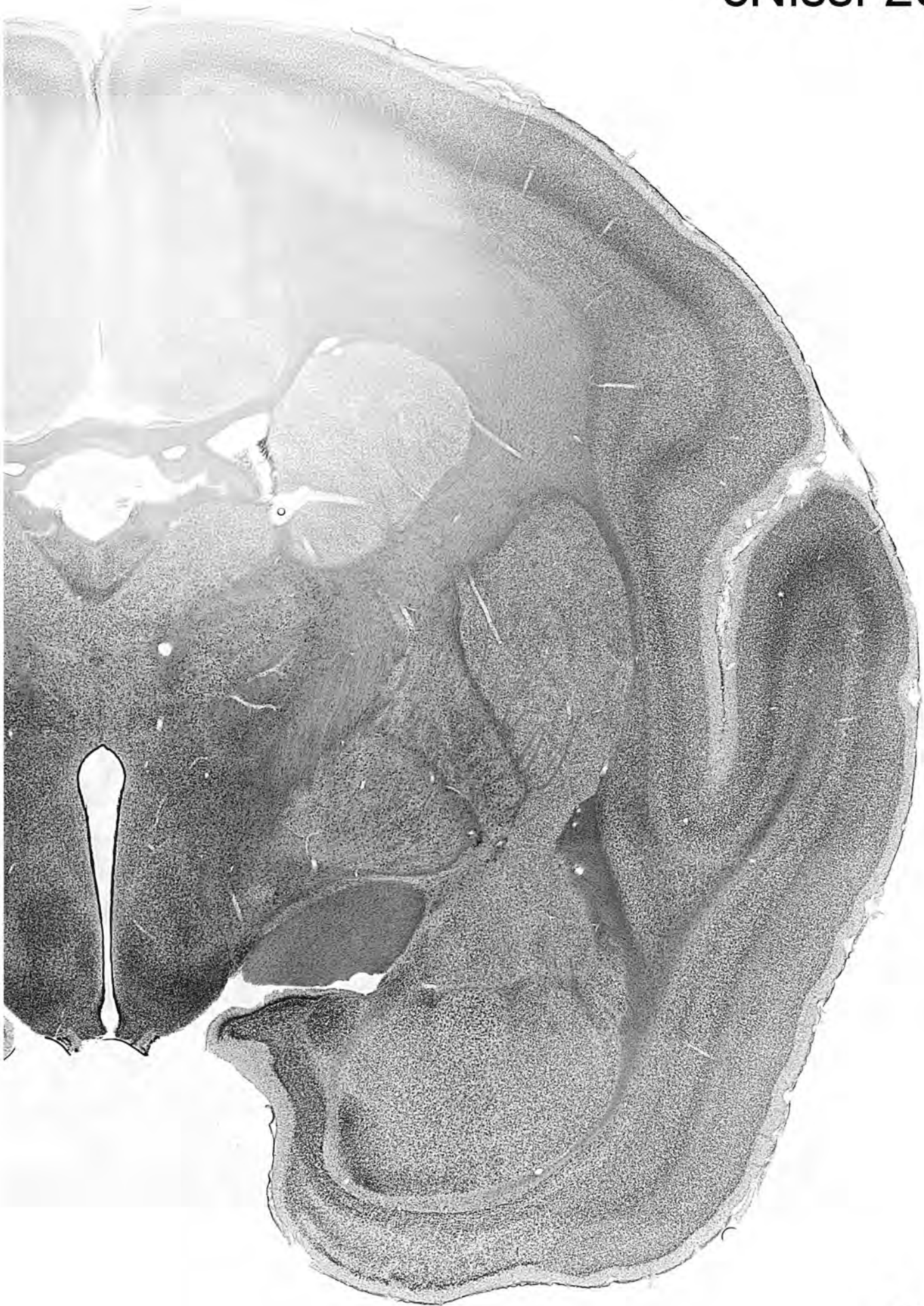


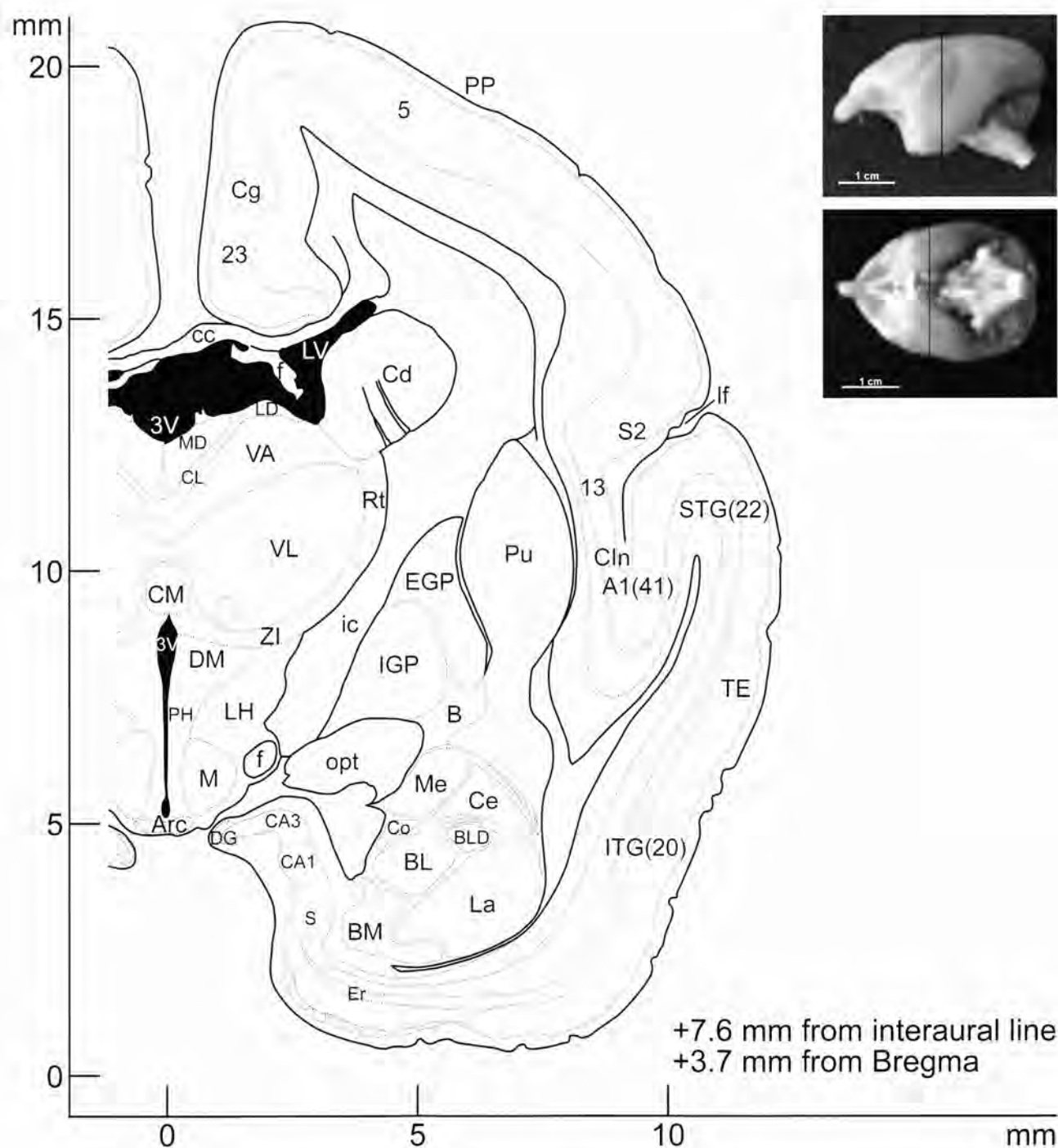
5, 13, 20, 22, 23, 41, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; acp, anterior commissure, posterior part; AH, Ammon's horn; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; CeM, central amygdaloid nucleus, medial division; Cg, cingulate cortex; Cln, insularis cortex; Co, cortical amygdaloid nucleus; DG, dentate gyrus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; lenf, lenticular fasciculus; If, lateral fissure; LH, lateral hypothalamic area; LM, lateral mammillary nucleus; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; Me, medial amygdaloid nucleus; MM, medial mammillary nucleus, medial part; opt, optic tract; PH, posterior hypothalamic area; PP, posterior parietal cortex; Pu, putamen; PV, paraventricular thalamic nucleus; Rt, reticular thalamic nucleus; S, subiculum; SON, supraoptic nucleus; S2, secondary somatosensory area; STG, superior temporal gyrus; TE, temporal cortex; VAL, ventral anterior thalamic nucleus, lateral part; VAM, ventral anterior thalamic nucleus, medial part; VL, ventral lateral thalamic nucleus.





5, 13, 20, 22, 23, 41, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; acp, anterior commissure, posterior part; AH, Ammon's horn; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; CIn, insularis cortex; CL, central lateral thalamic nucleus; Co, cortical amygdaloid nucleus; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; IH, infundibular nucleus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; LH, lateral hypothalamic area; LV, lateral ventricle; M, mamillary nucleus; MD, mediodorsal thalamic nucleus; Me, medial amygdaloid nucleus; opt, optic tract; PH, posterior hypothalamic area; PP, Posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; SON, supraoptic nucleus; S2, secondary somatosensory area; STG, superior temporal gyrus; TE, temporal cortex; VAL, ventral anterior thalamic nucleus, lateral part; VAM, ventral anterior thalamic nucleus, medial part; VL, ventral lateral thalamic nucleus.

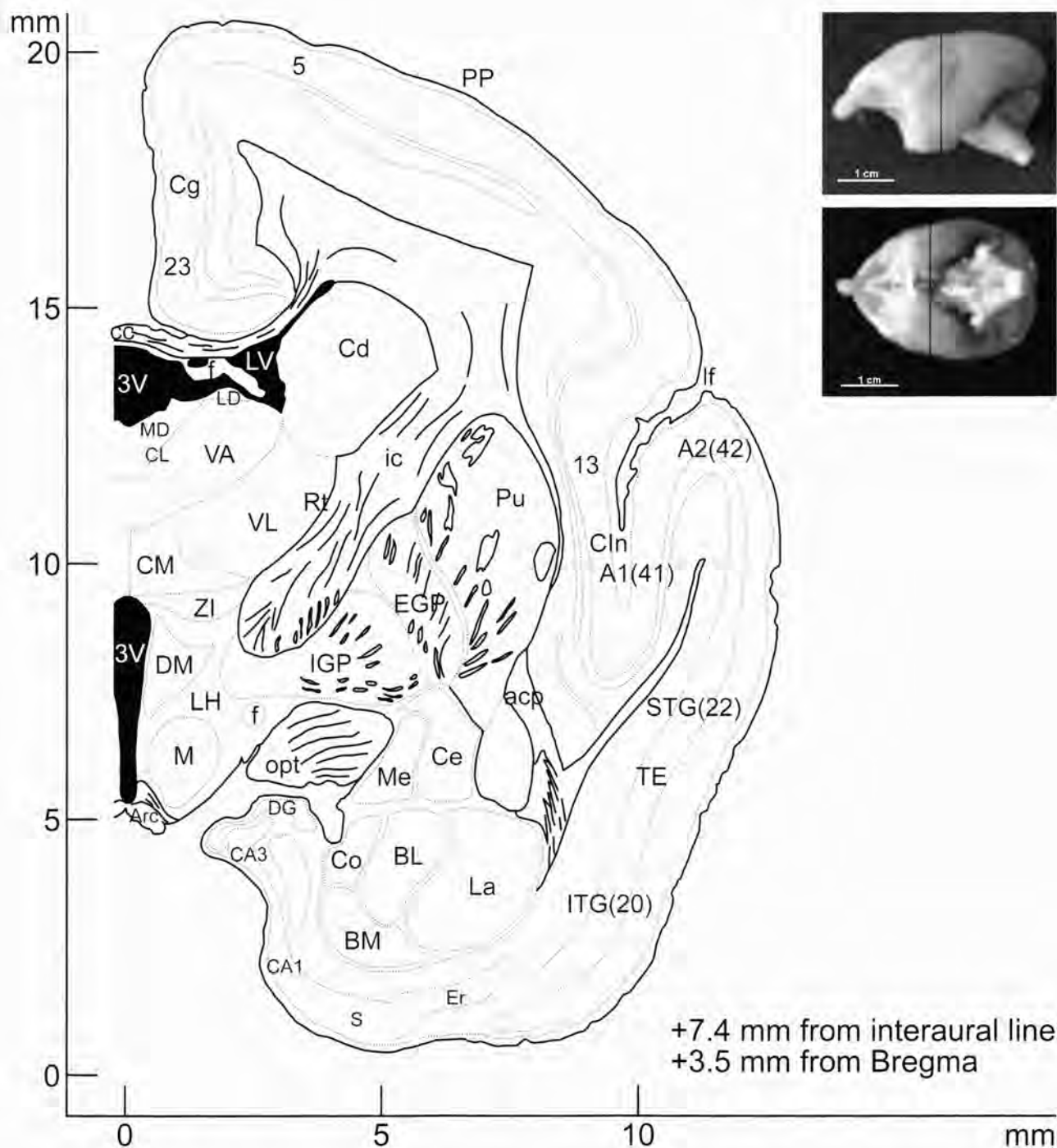




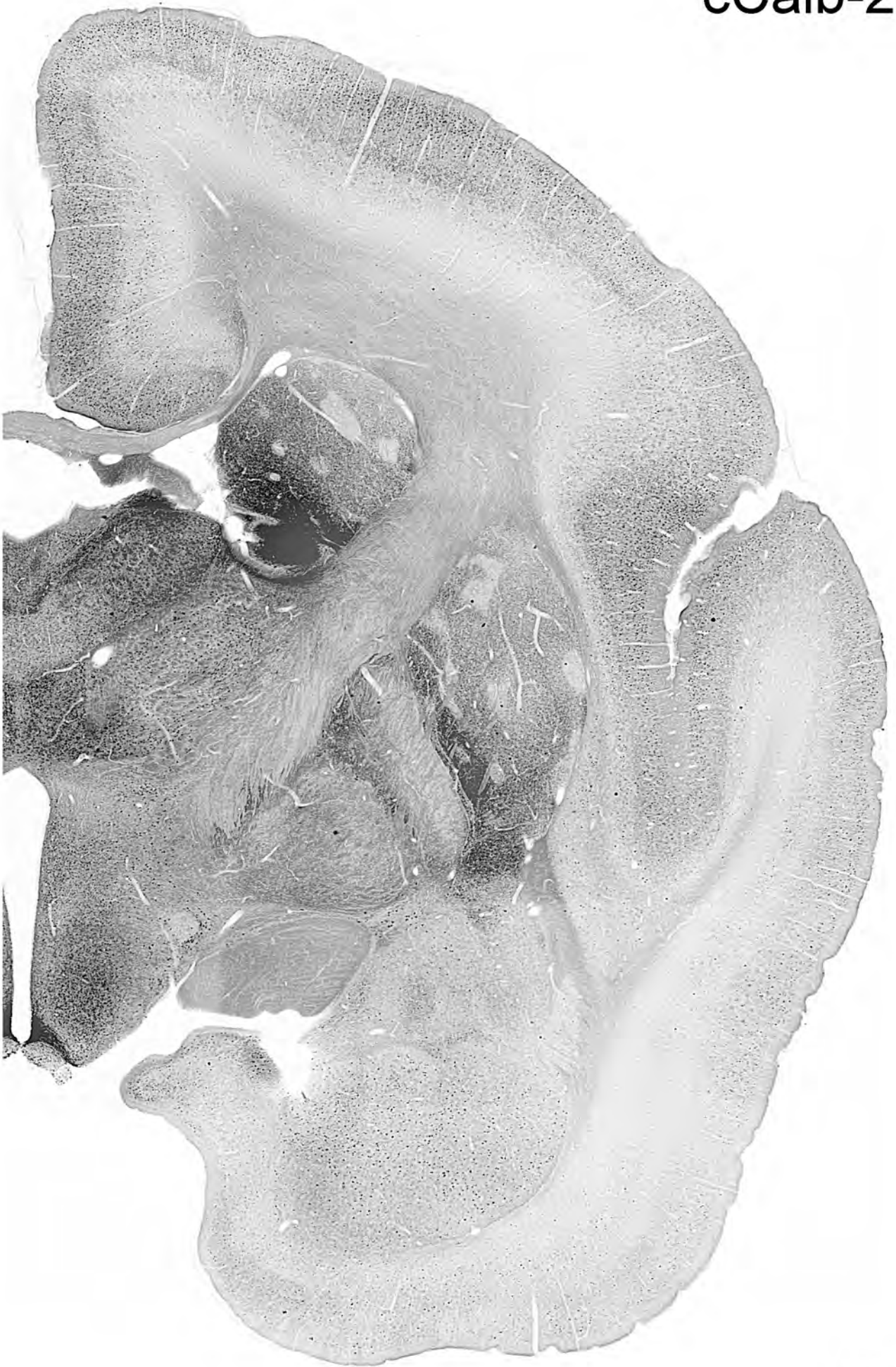
5, 13, 20, 22, 23, 41, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; Arc, arcuate hypothalamic nucleus; B, basal nucleus (Meynert); BL, basolateral amygdaloid nucleus; BLD, basolateral amygdaloid nucleus, dorsal part; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; CIn, insularis cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; Co, cortical amygdaloid nucleus; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; If, lateral fissure; LH, lateral hypothalamic area; LV, lateral ventricle; M, mamillary nucleus; MD, mediodorsal thalamic nucleus; Me, medial amygdaloid nucleus; opt, optic tract; PH, posterior hypothalamic area; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; S2, secondary somatosensory area; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VL, ventral lateral thalamic nucleus; ZI, zona incerta.



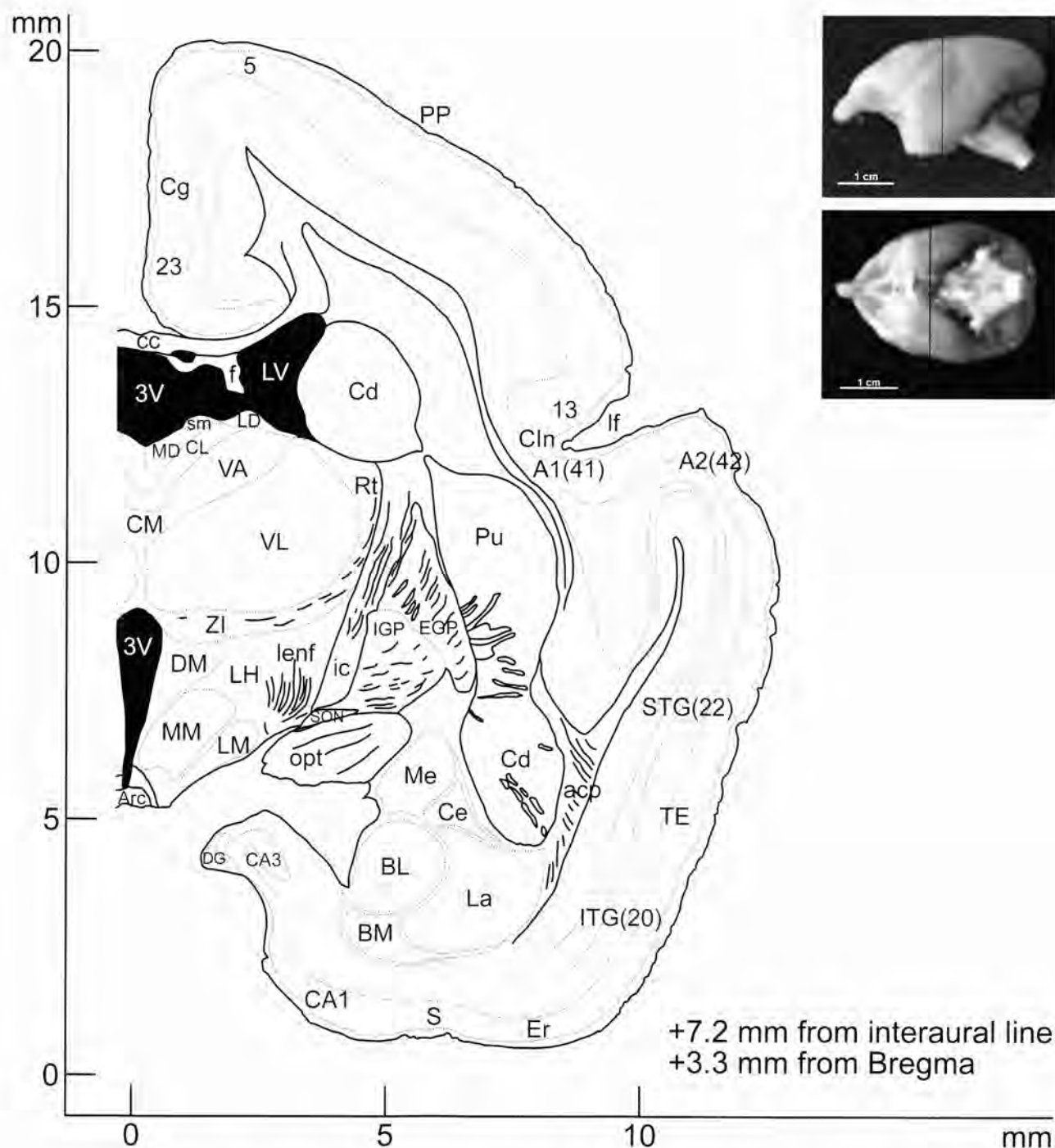
cTr-27



5, 13, 20, 22, 23, 41, 42, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; A2, secondary auditory region; acp, anterior commissure, posterior part; Arc, arcuate hypothalamic nucleus; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; Cln, insularis cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; Co, cortical amygdaloid nucleus; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; If, lateral fissure; LH, lateral hypothalamic area; LV, lateral ventricle; M, mamillary nucleus; MD, mediodorsal thalamic nucleus; Me, medial amygdaloid nucleus; opt, optic tract; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VL, ventral lateral thalamic nucleus; ZI, zona incerta.

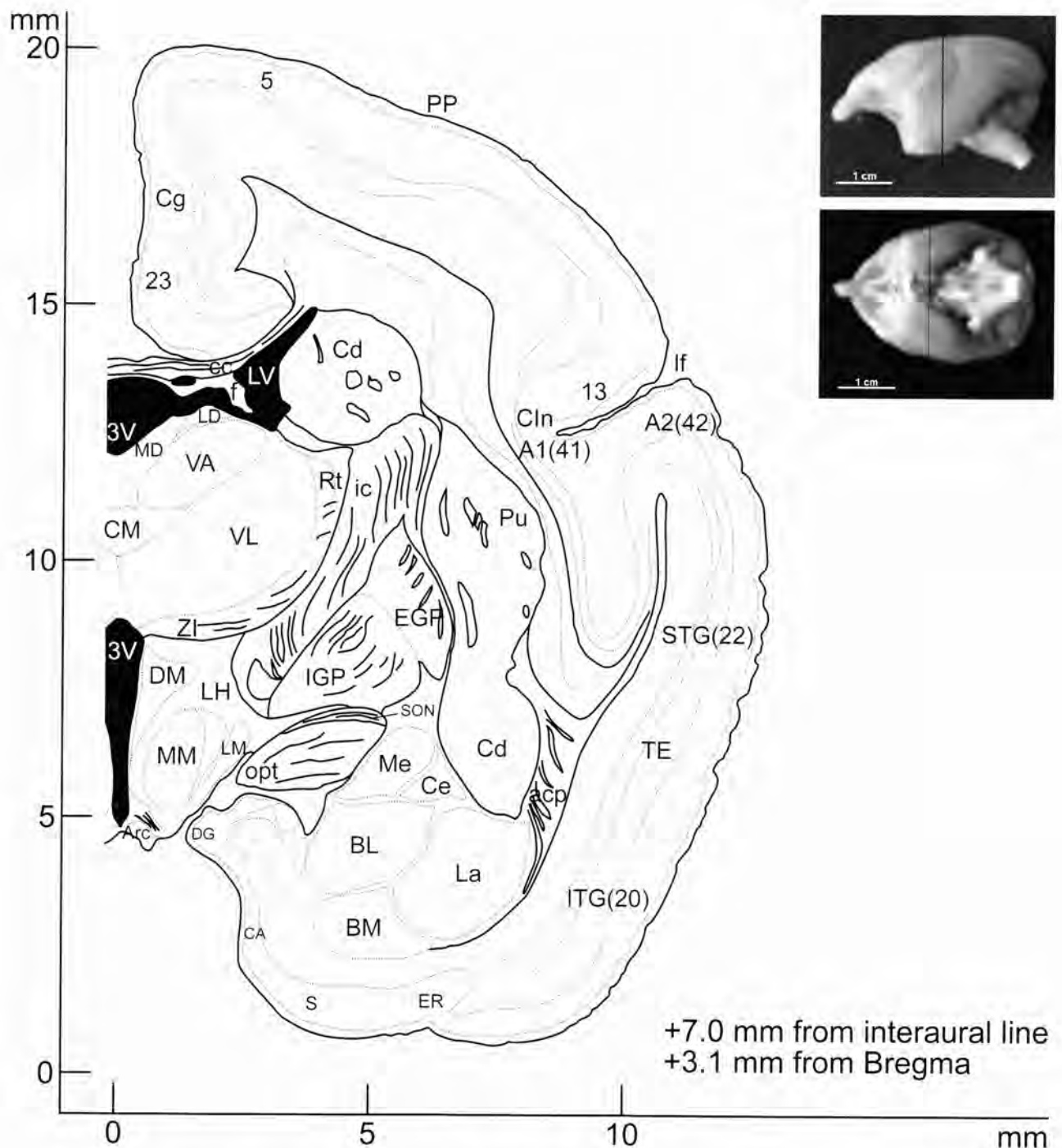


cTr-28

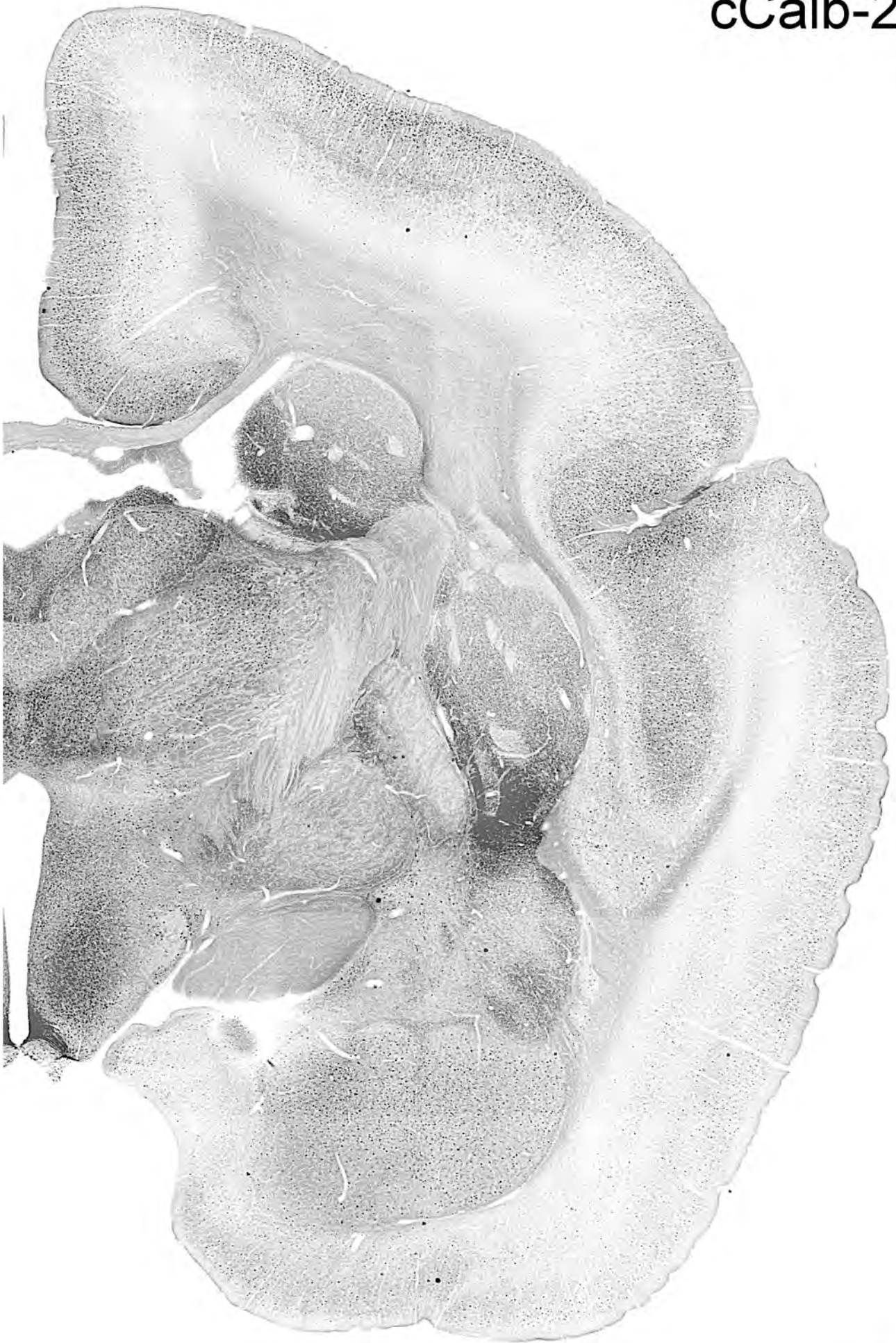


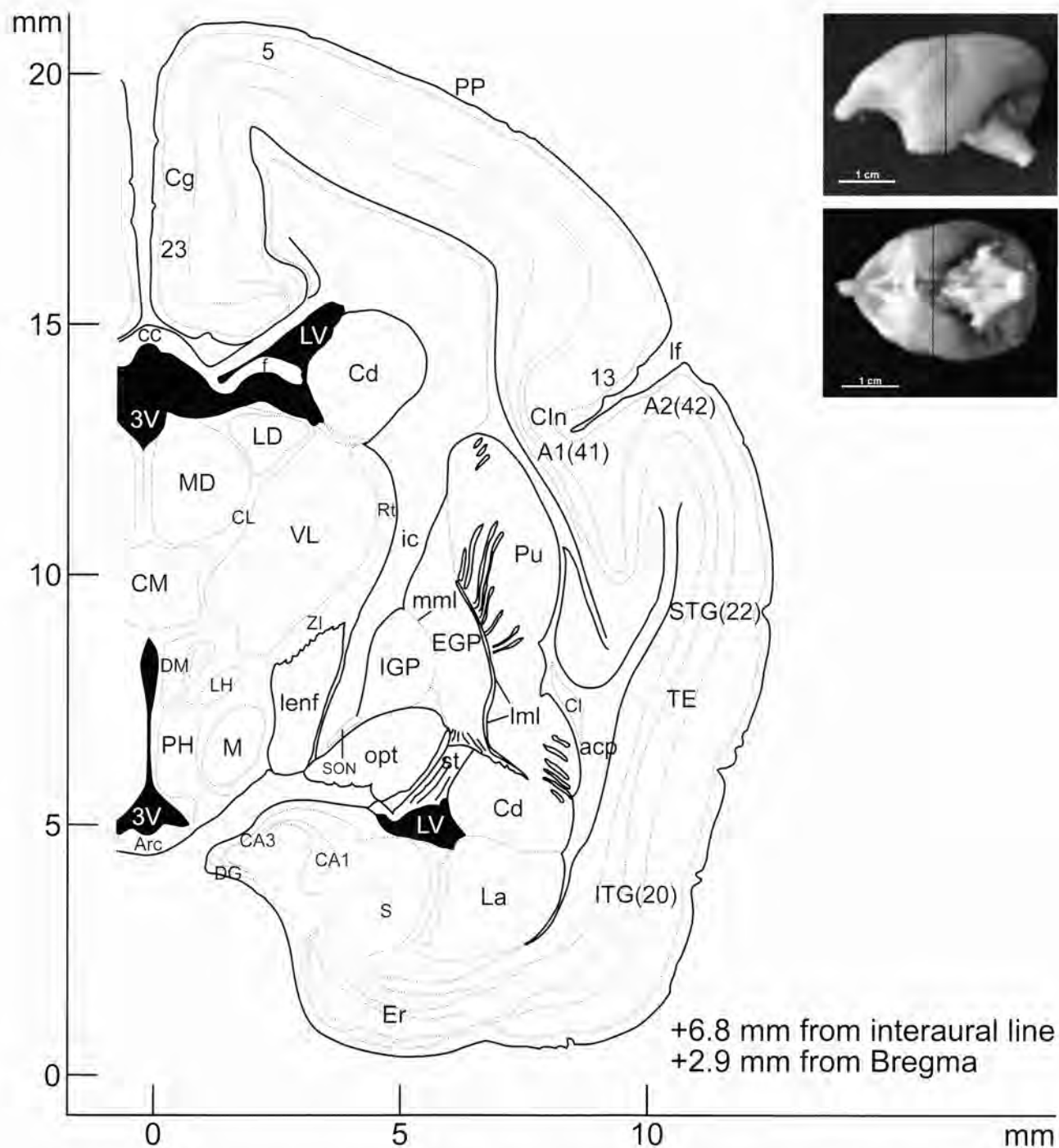
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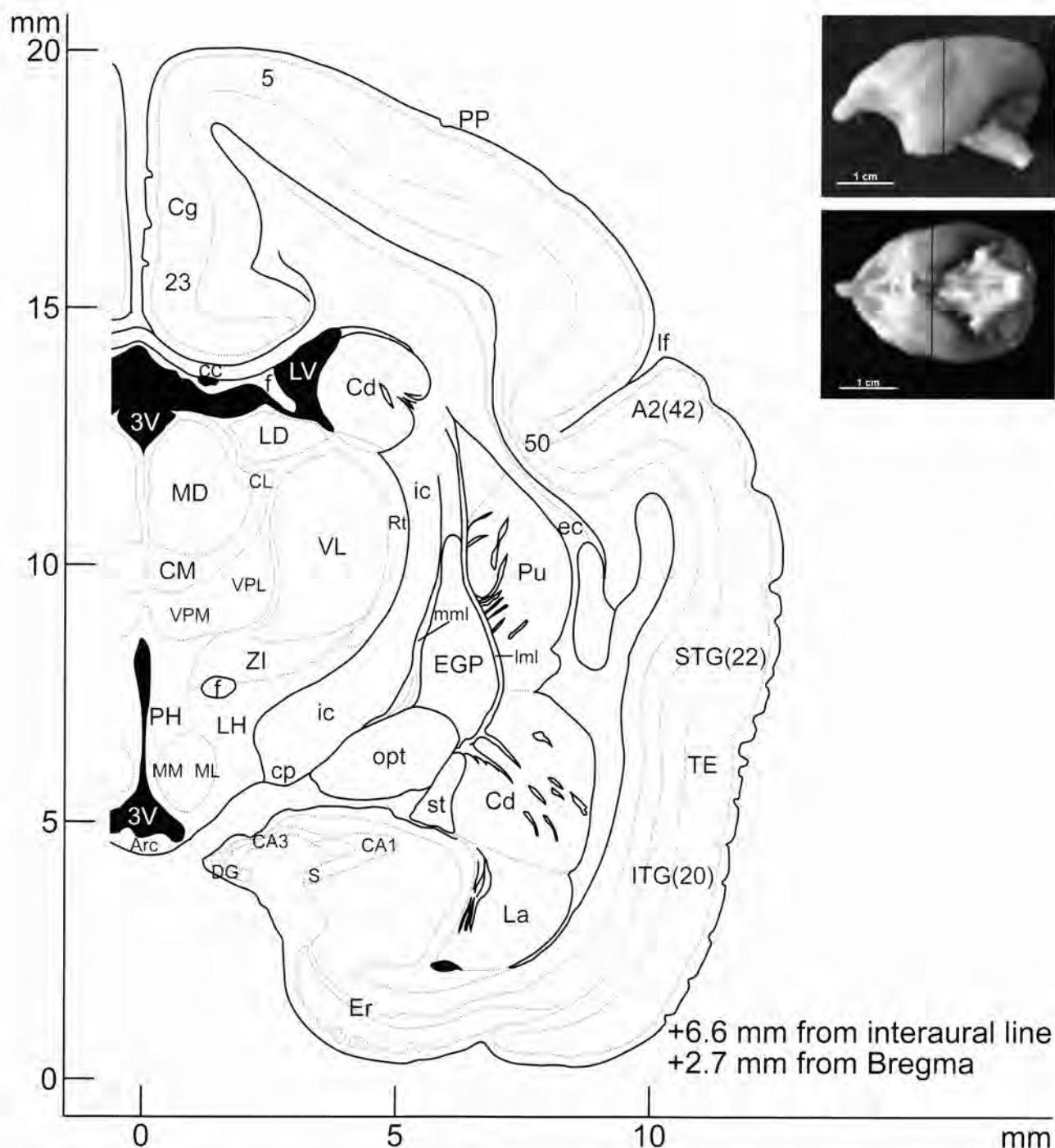
5, 13, 20, 22, 23, 41, 42, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; A2, secondary auditory region; acp, anterior commissure, posterior part; Arc, arcuate hypothalamic nucleus; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; CA, Cornu Ammonis; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cg, cingulate cortex; Cln, insularis cortex; CM, central medial thalamic nucleus; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; lf, lateral fissure; LH, lateral hypothalamic area; LM, lateral mammillary nucleus; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; Me, medial amygdaloid nucleus; MM, medial mammillary nucleus, medial part; opt, optic tract; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; SON, supraoptic nucleus; STG, superior temporal gyrus; TE, temporal cortex; VA, ventral anterior thalamic nucleus; VL, ventral lateral thalamic nucleus; ZI, zona incerta.



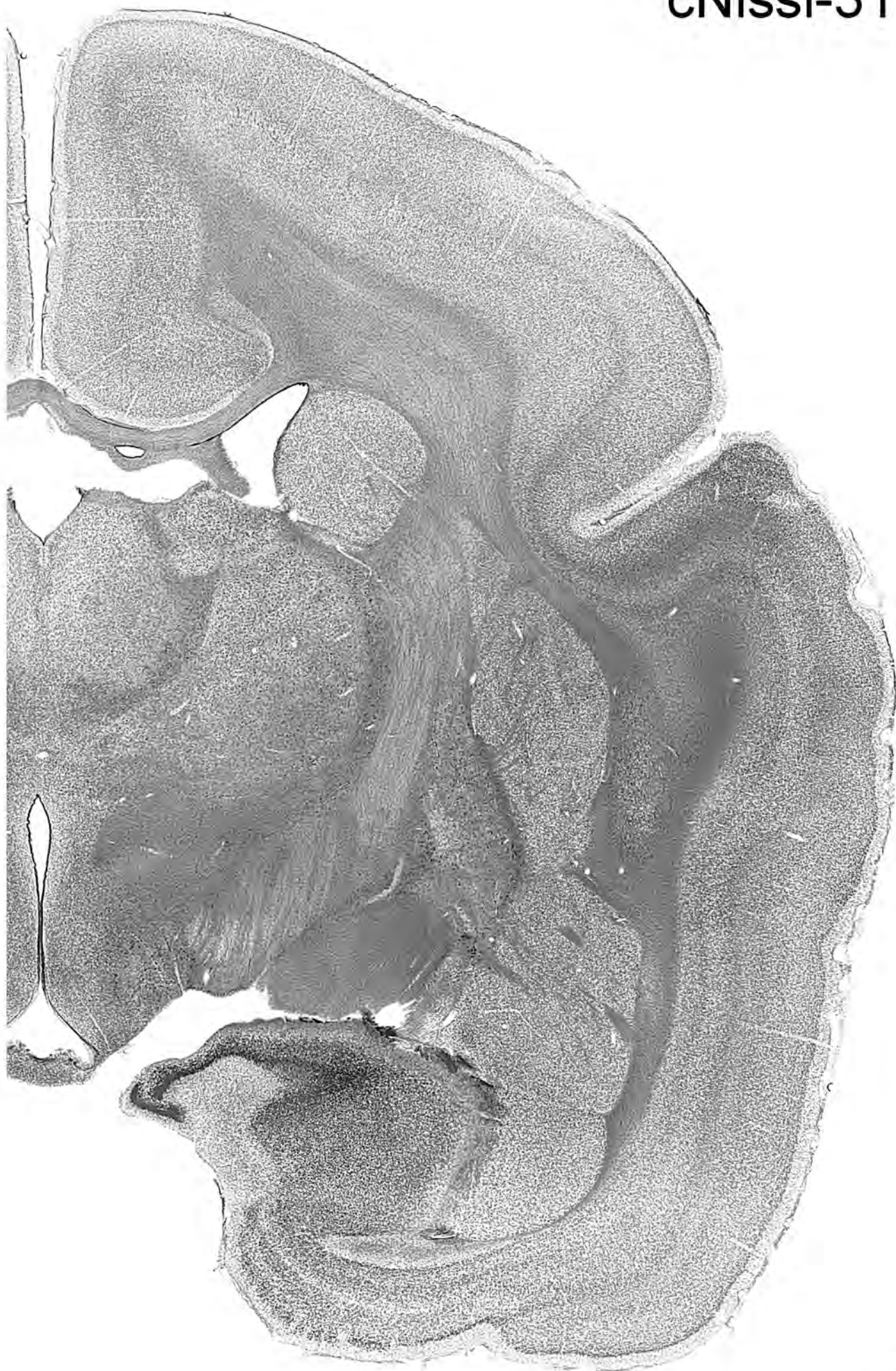


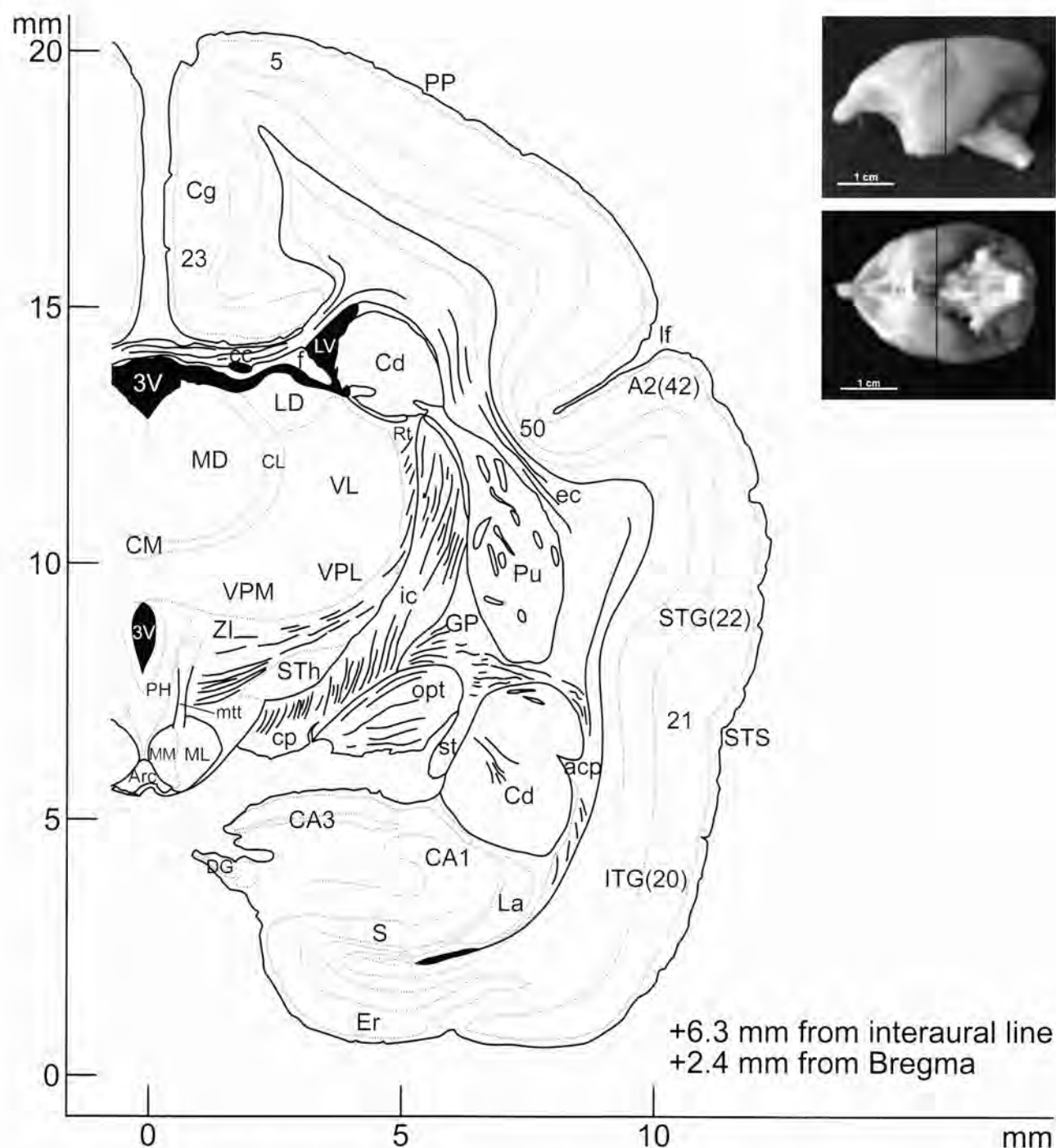
5, 13, 20, 22, 23, 41, 42, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A1, primary auditory area; A2, secondary auditory region; acp, anterior commissure, posterior part; Arc, arcuate hypothalamic nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; Cln, insularis cortex; Cl, claustrum; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; lenf, lenticular fasciculus; lf, lateral fissure; LH, lateral hypothalamic area; lml, lateral medullary lamina; LV, lateral ventricle; M, mamillary nucleus; MD, medio-dorsal thalamic nucleus; mml, medial medullary lamina; opt, optic tract; PH, posterior hypothalamic area; PP, Posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; SON, supraoptic nucleus; st, stria terminalis; STG, superior temporal gyrus; TE, temporal cortex; VL, ventral lateral thalamic nucleus; ZI, zona incerta.





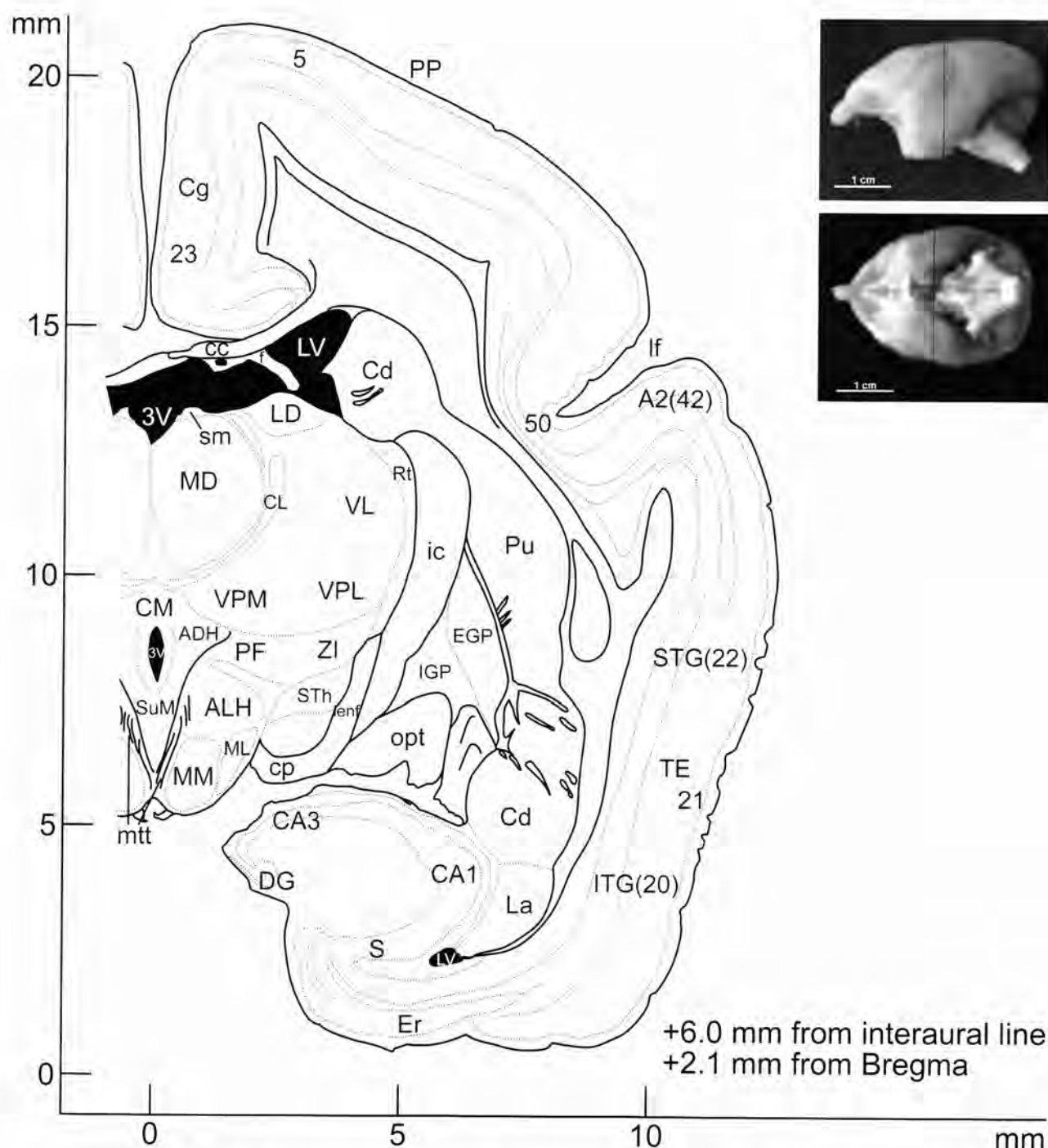
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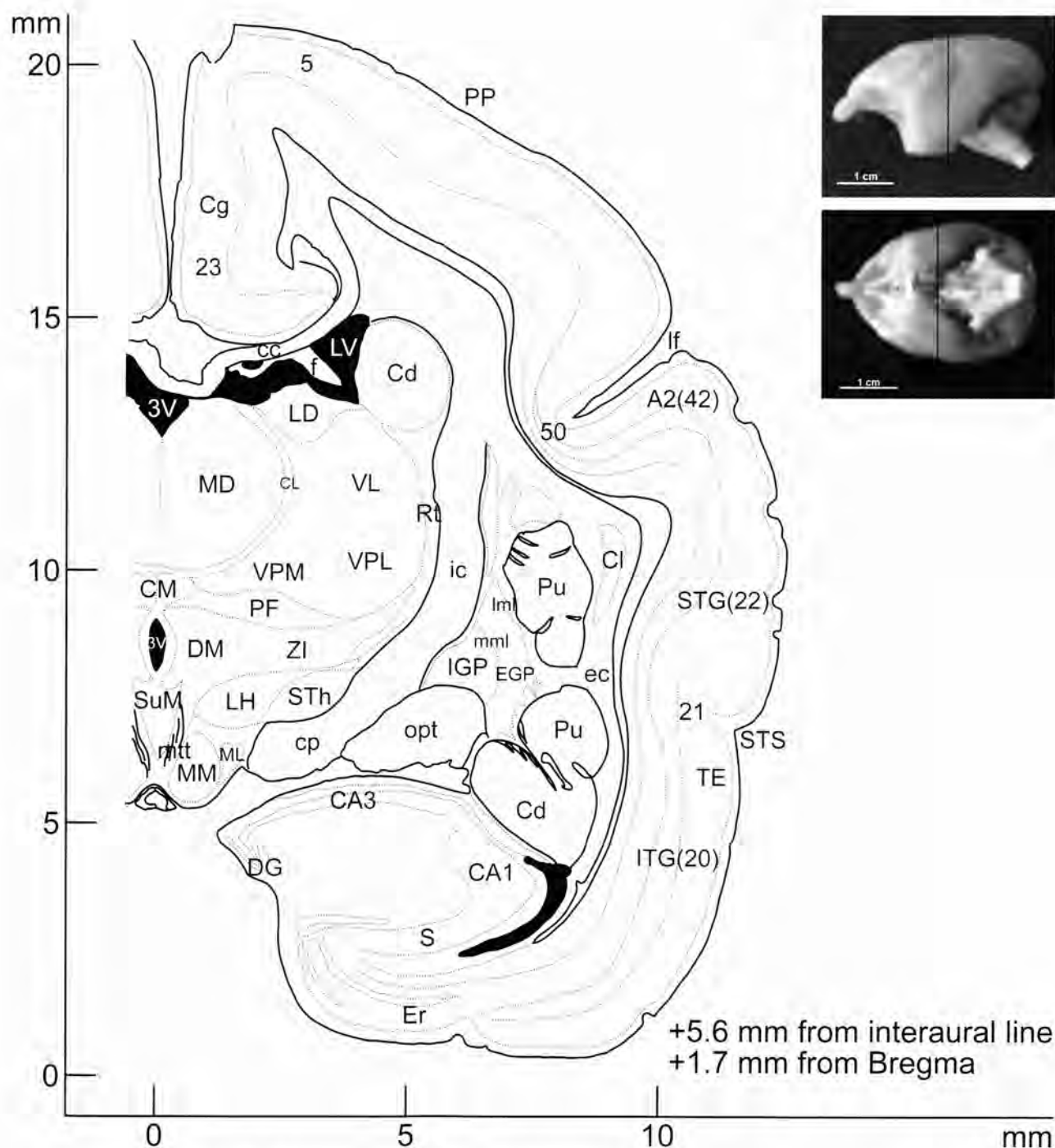
5, 20, 21, 22, 23, 42, 50, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; acp, anterior commissure, posterior part; Arc, arcuate hypothalamic nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; ec, external capsule; Er, entorhinal cortex; f, fornix; GP, globus pallidus; ic, internal capsule; ITG, inferior temporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; lf, lateral fissure; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; ML, medial mammillary nucleus, lateral part; MM, medial mammillary nucleus, medial part; mtt, mamillothalamic tract; opt, optic tract; PH, posterior hypothalamic area; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; st, stria terminalis; STG, superior temporal gyrus; STh, subthalamic nucleus; STS, superior temporal sulcus; VL, ventral lateral thalamic nucleus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.





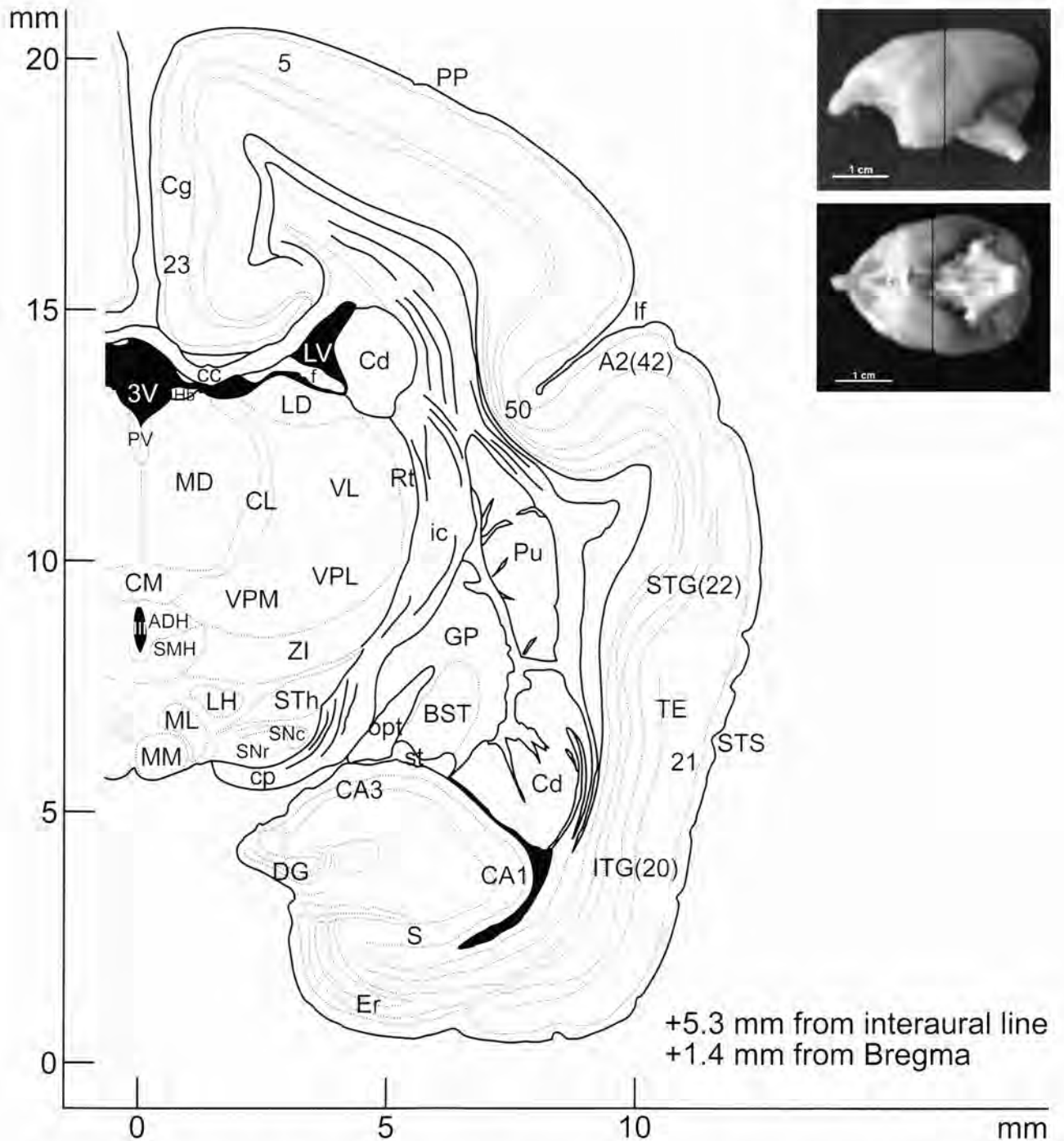
5, 20, 21, 22, 23, 42, 50, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; ADH, dorsal hypothalamic area; ALH, lateral hypothalamic area; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, infero-temporal gyrus; La, lateral amygdaloid nucleus; LD, lateral dorsal thalamic nucleus; lenf, lenticular fasciculus; lf, lateral fissure; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; ML, medial mammillary nucleus, lateral part; MM, medial mammillary nucleus, medial part; mtt, mamillothalamic tract; opt, optic tract; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; sm, stria medullaris of the thalamus; STG, superior temporal gyrus; STh, subthalamic nucleus; SuM, supramammillary nucleus; TE, temporal cortex; VL, ventral lateral thalamic nucleus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.



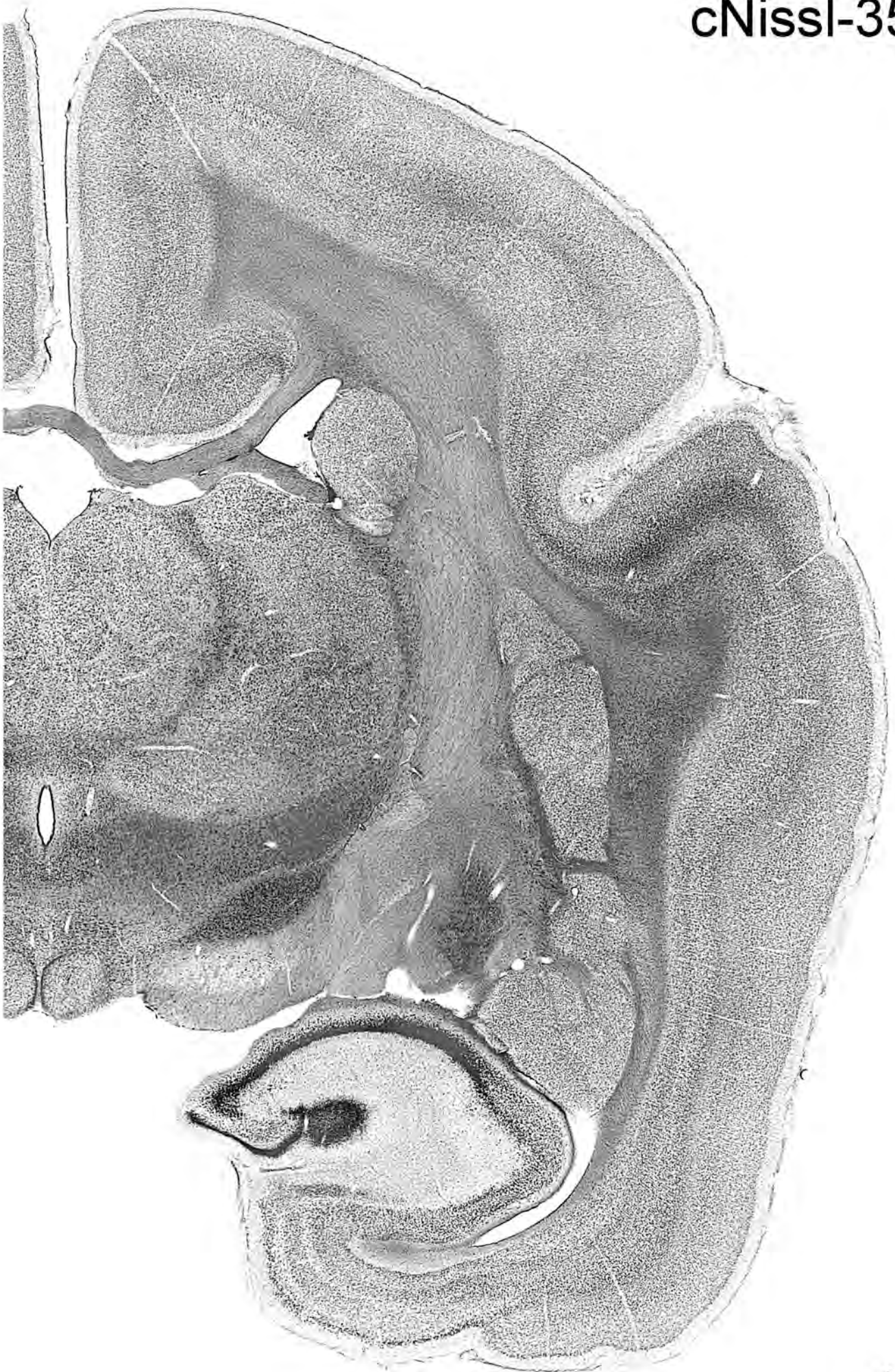


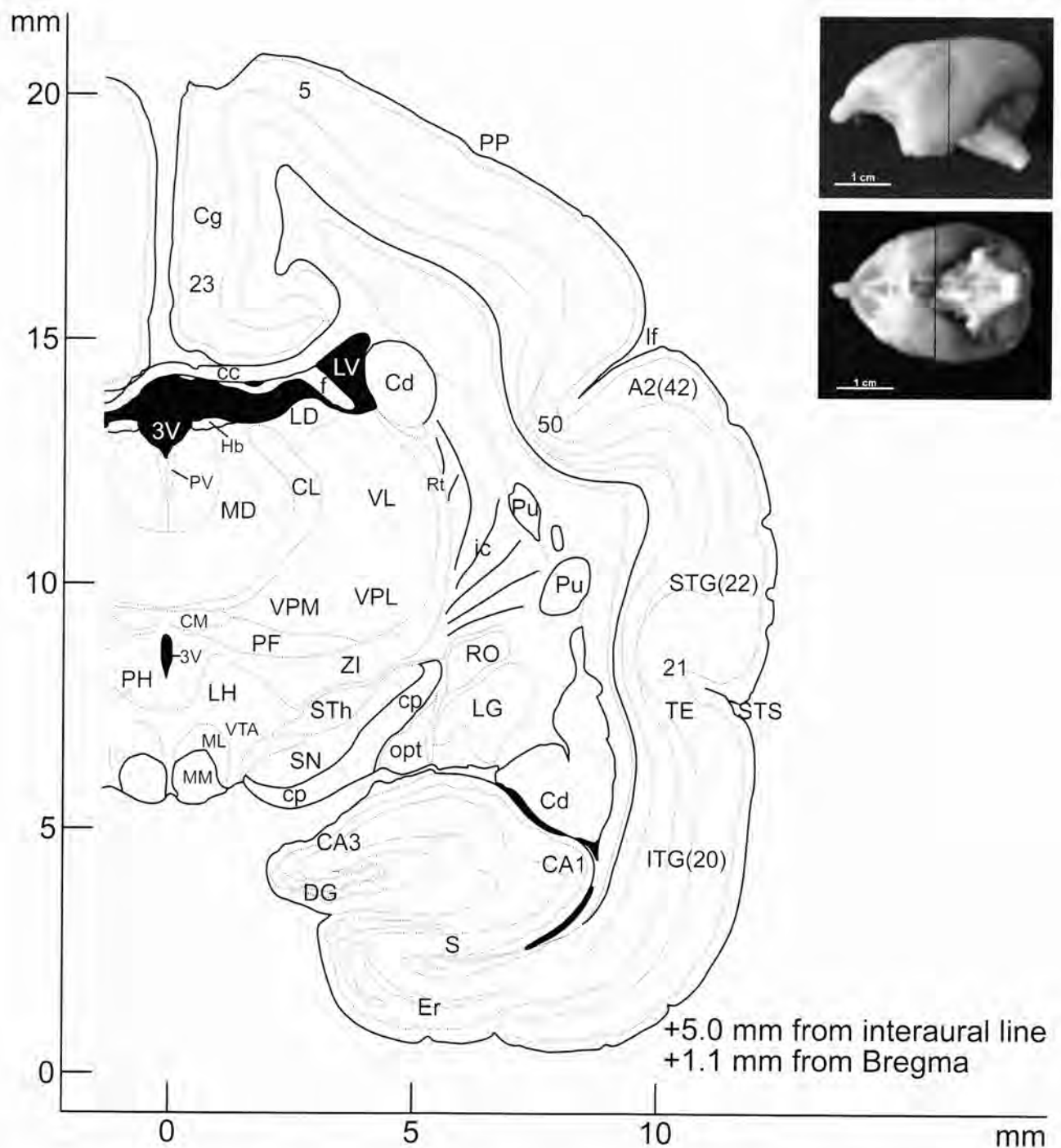
5, 20, 21, 22, 23, 42, 50, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; Cl, claustrum; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; DM, dorsomedial hypothalamic nucleus; ec, external capsule; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; ITG, inferotemporal gyrus; LD, lateral dorsal thalamic nucleus; lf, lateral fissure; LH, lateral hypothalamic area; lml, lateral medullary lamina; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; ML, medial mammillary nucleus, lateral part; MM, medial mammillary nucleus, medial part; mml, medial medullary lamina; mtt, mamillo-thalamic tract; opt, optic tract; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; STG, superior temporal gyrus; STh, subthalamic nucleus; STS, superior temporal sulcus; SuM, supramammillary nucleus; TE, temporal cortex; VL, ventral lateral thalamic nucleus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.

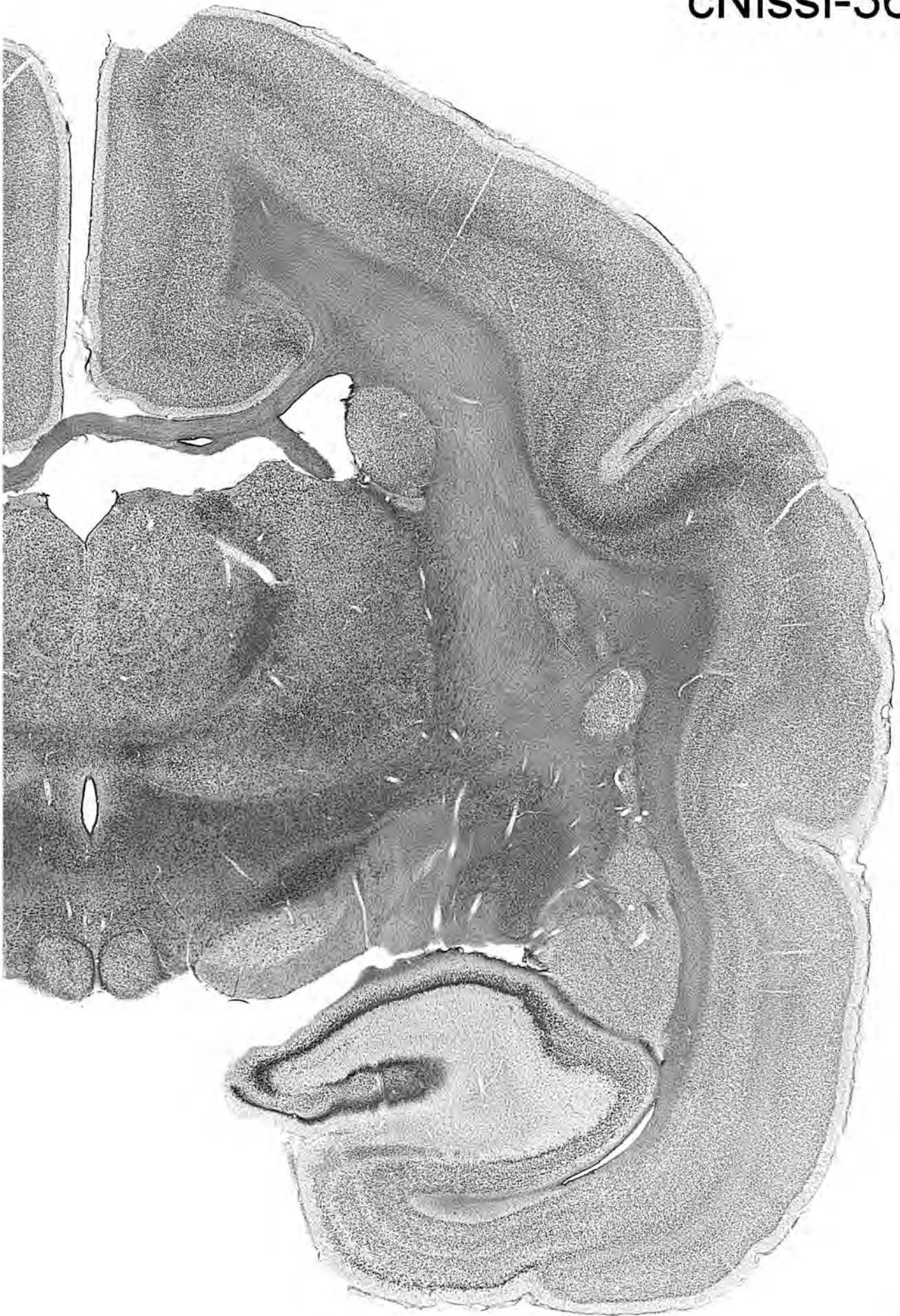


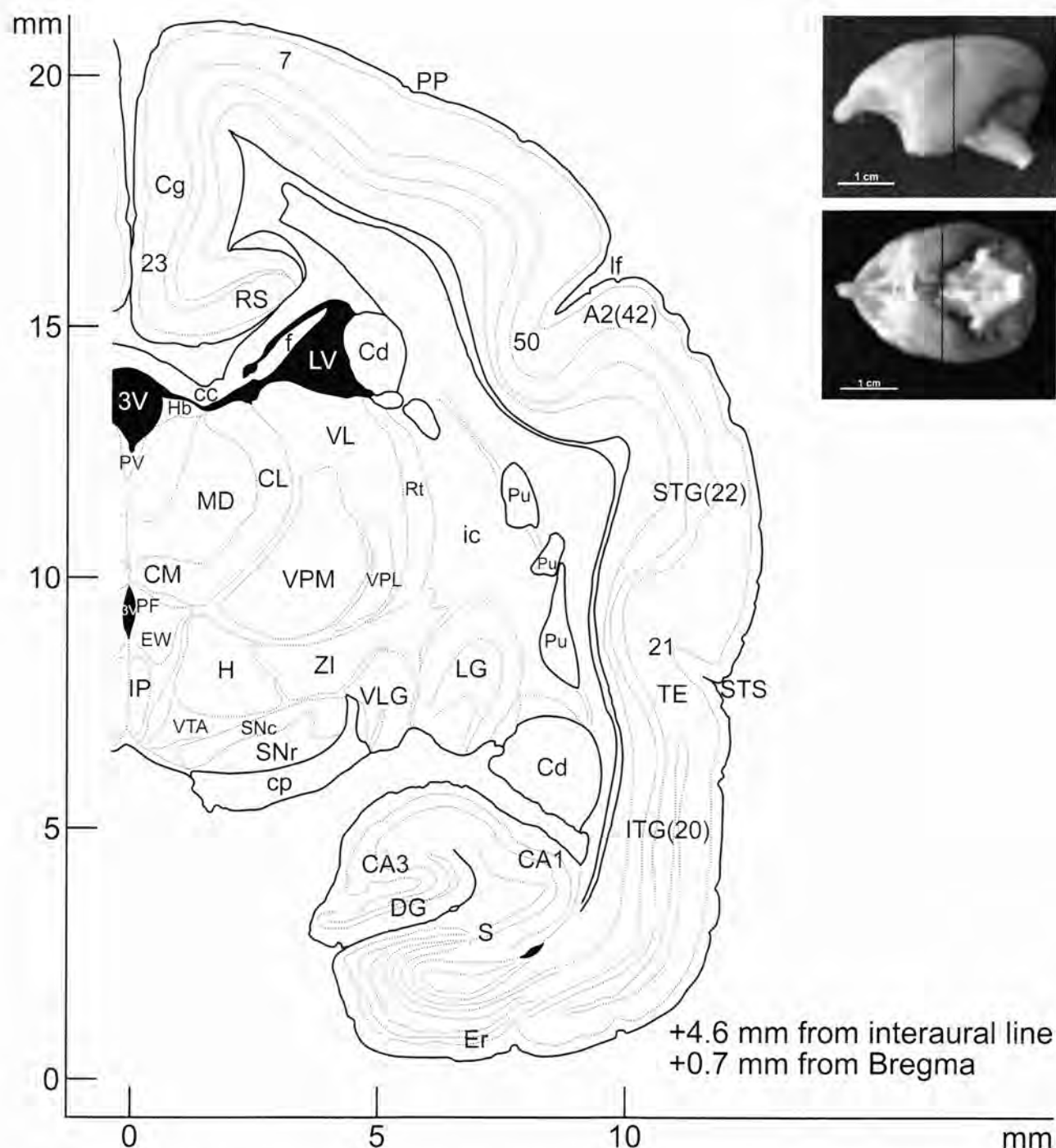


5, 20, 21, 22, 23, 42, 50, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; ADH, dorsal hypothalamic area; BST, bed nucleus of the stria terminalis; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; Er, entorhinal cortex; f, fornix; GP, globus pallidus; Hb, habenular nucleus; ic, internal capsule; ITG, inferotemporal gyrus; LD, lateral dorsal thalamic nucleus; If, lateral fissure; LH, lateral hypothalamic area; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; ML, medial mammillary nucleus, lateral part; MM, medial mammillary nucleus, medial part; opt, optic tract; PP, posterior parietal cortex; Pu, putamen; PV, paraventricular thalamic nucleus; Rt, reticular thalamic nucleus; S, subiculum; SMH, supramammillary hypothalamic nucleus; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; st, stria terminalis; STG, superior temporal gyrus; STh, subthalamus; STS, superior temporal sulcus; TE, temporal cortex; VL, ventral lateral thalamic nucleus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.

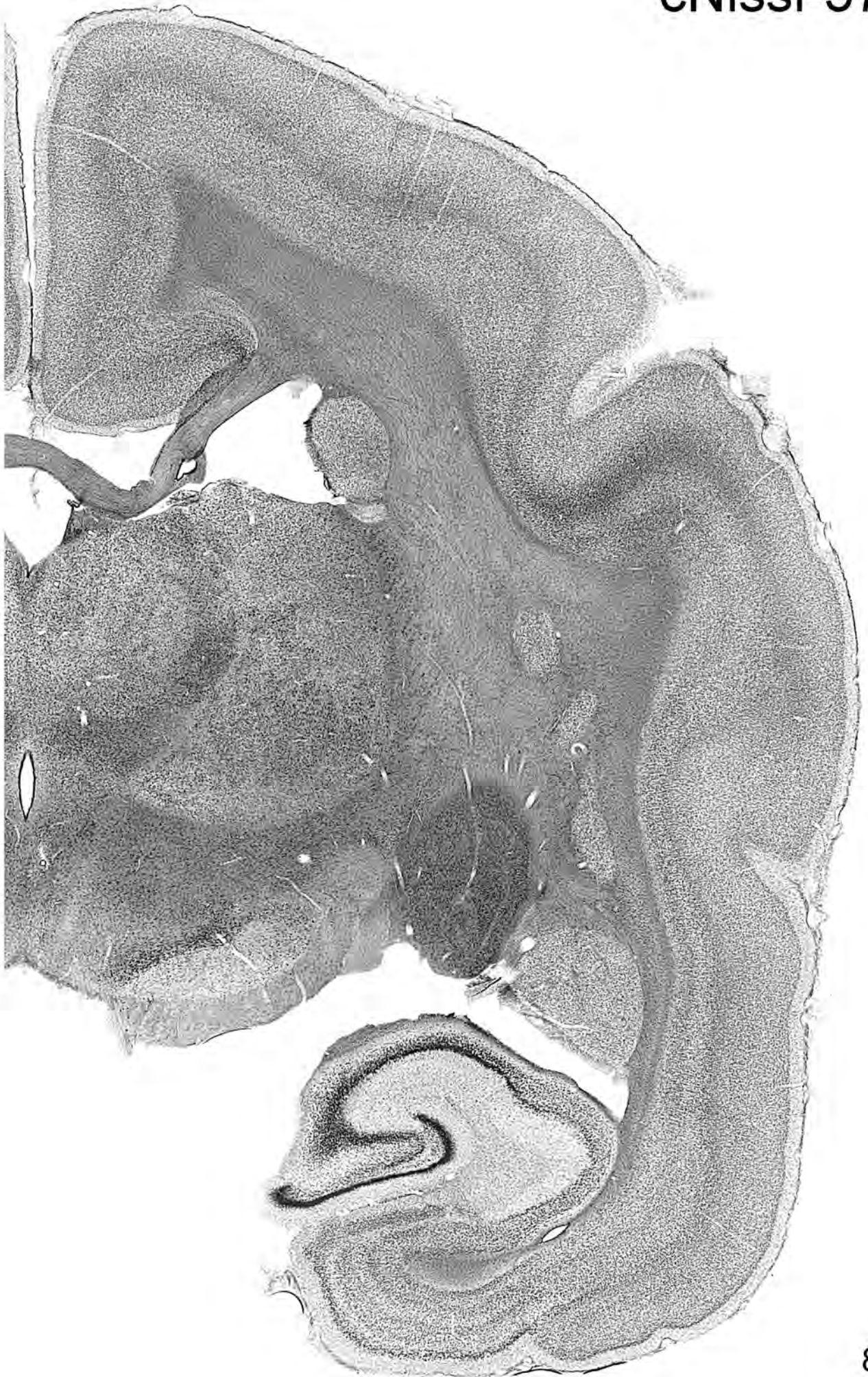


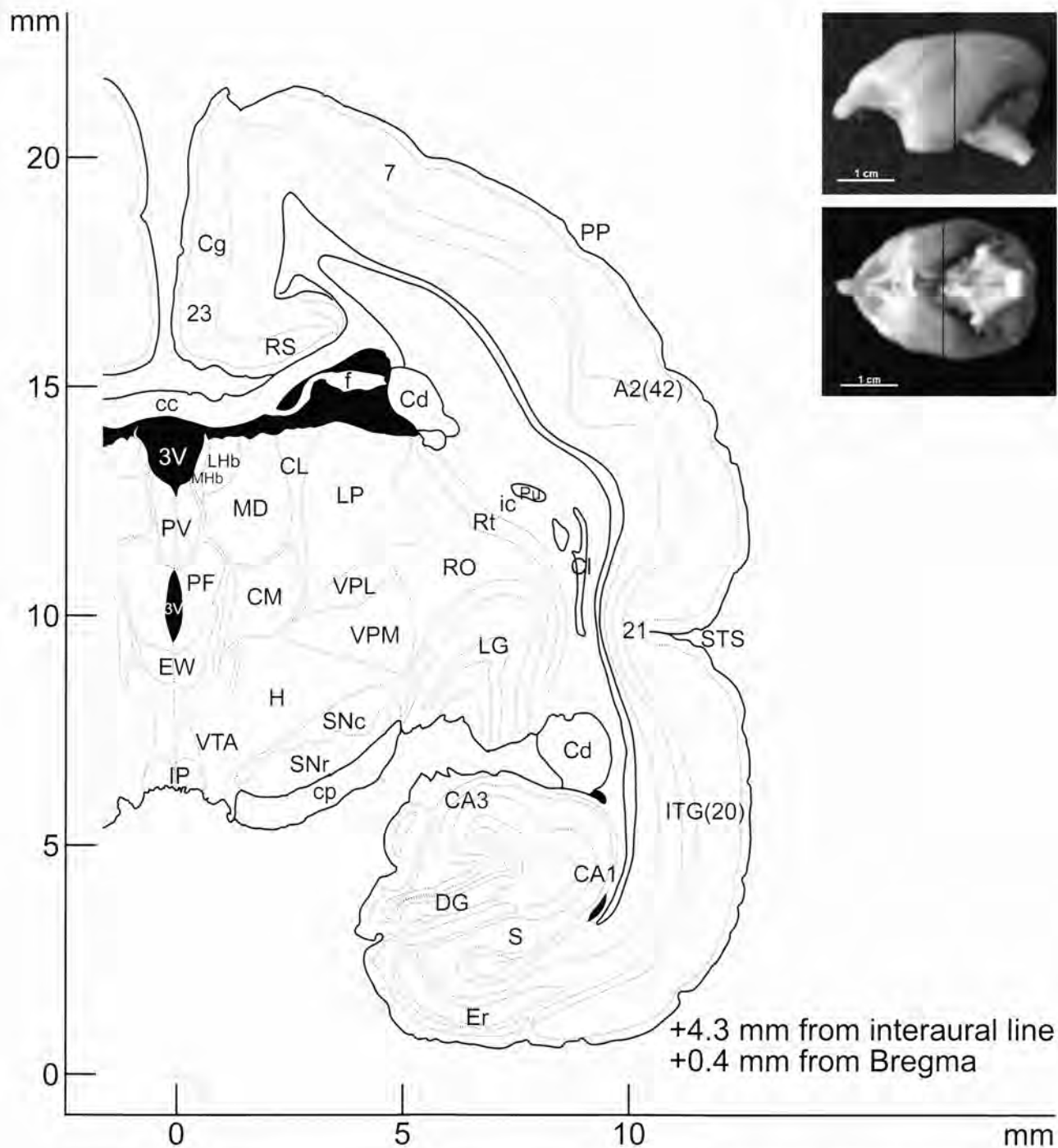






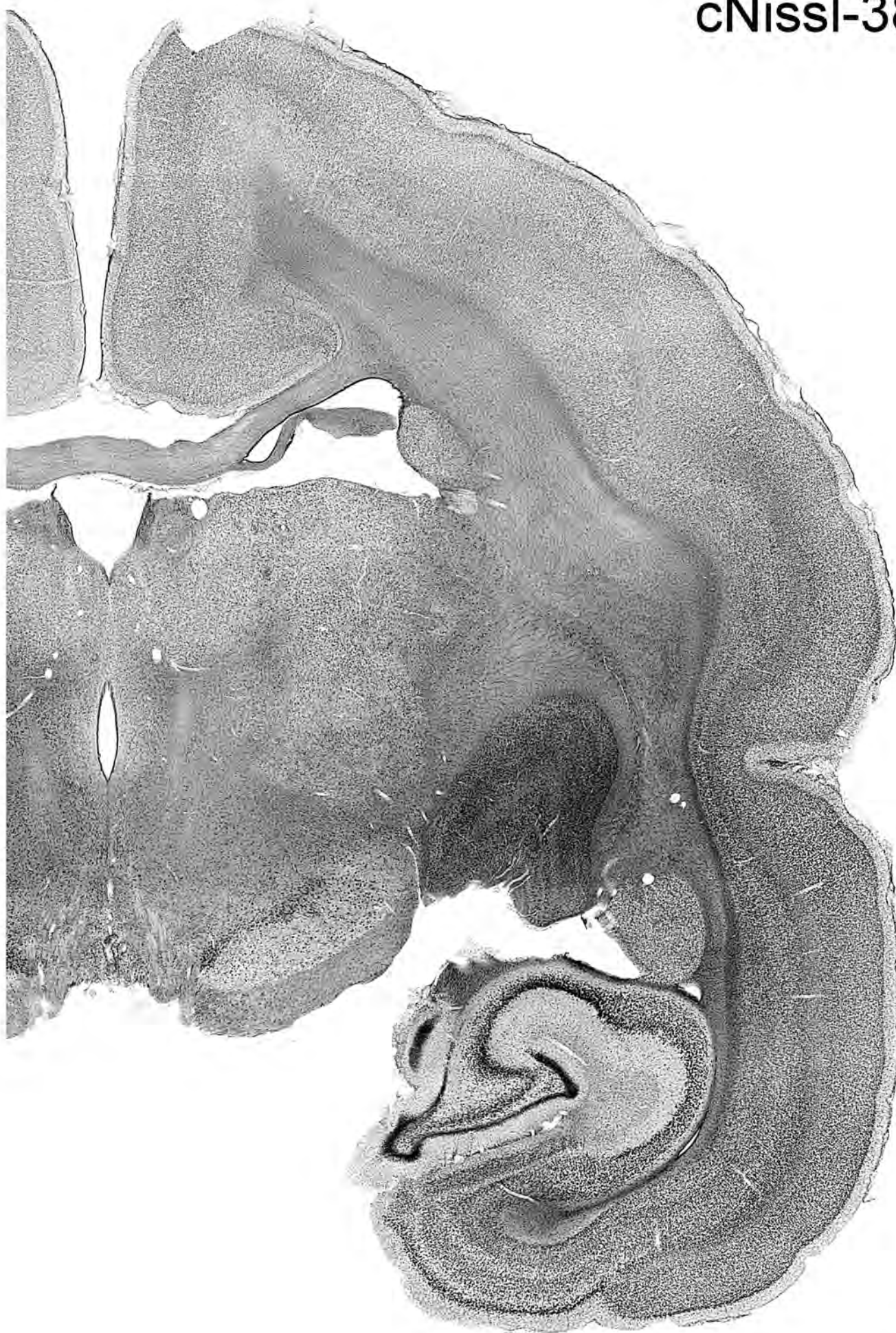
7, 20, 21, 22, 23, 42, 50, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; Er, entorhinal cortex; EW, Evinger-Westphal nucleus; f, fornix; H, campus Foreli; Hb, habenular nucleus; ic, internal capsule; IP, interpeduncular nucleus; ITG, inferotemporal gyrus; If, lateral fissure; LG, lateral geniculate nucleus; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; PF, para-fascicular thalamic nucleus; PP, posterior parietal cortex; Pu, putamen; PV, paraventricular thalamic nucleus; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STG, superior temporal gyrus; STS, superior temporal sulcus; TE, temporal cortex; VL, ventral lateral thalamic nucleus; VLG, ventral lateral geniculate nucleus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; VTA, ventral tegmental area; ZI, zona incerta.

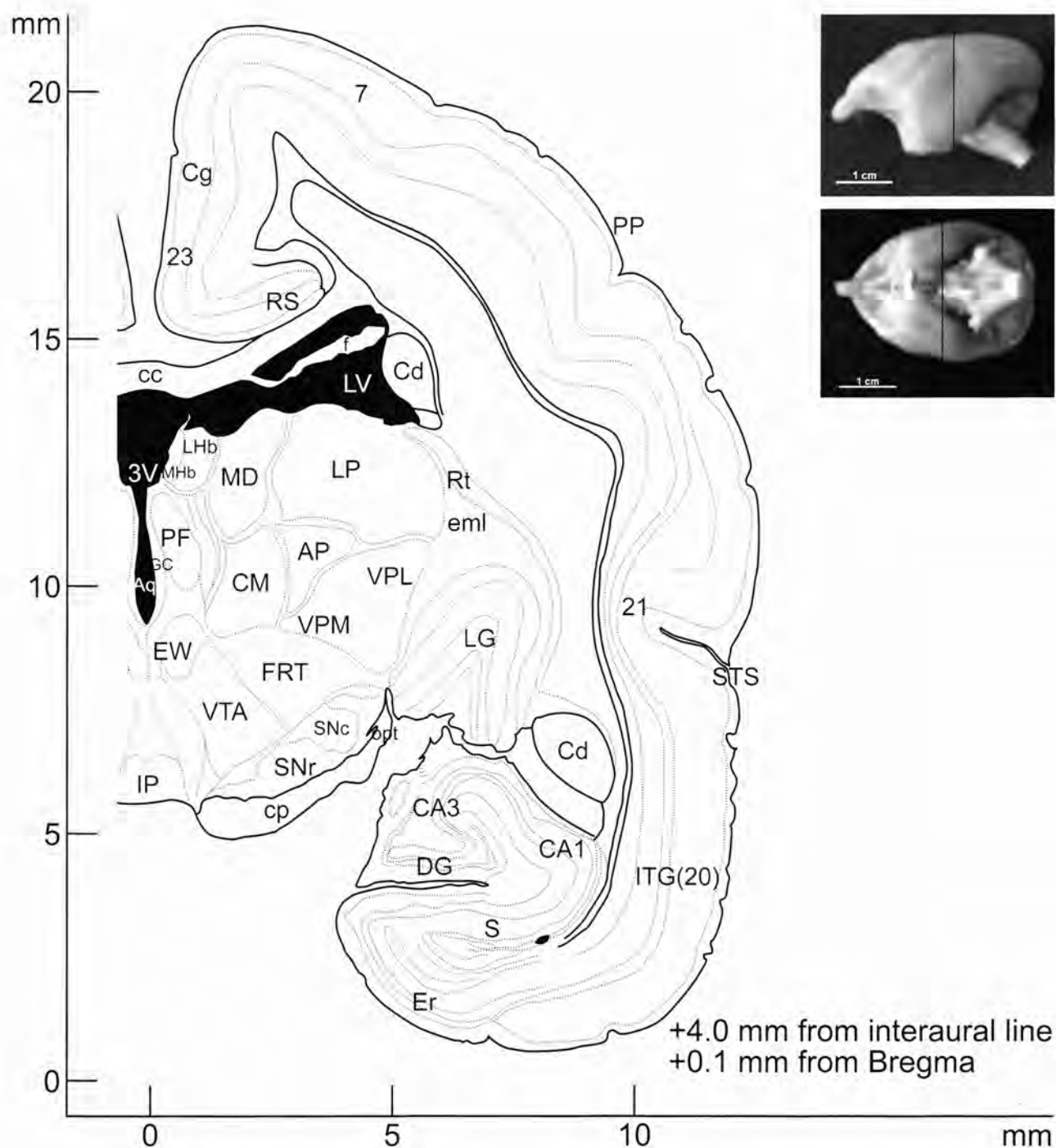




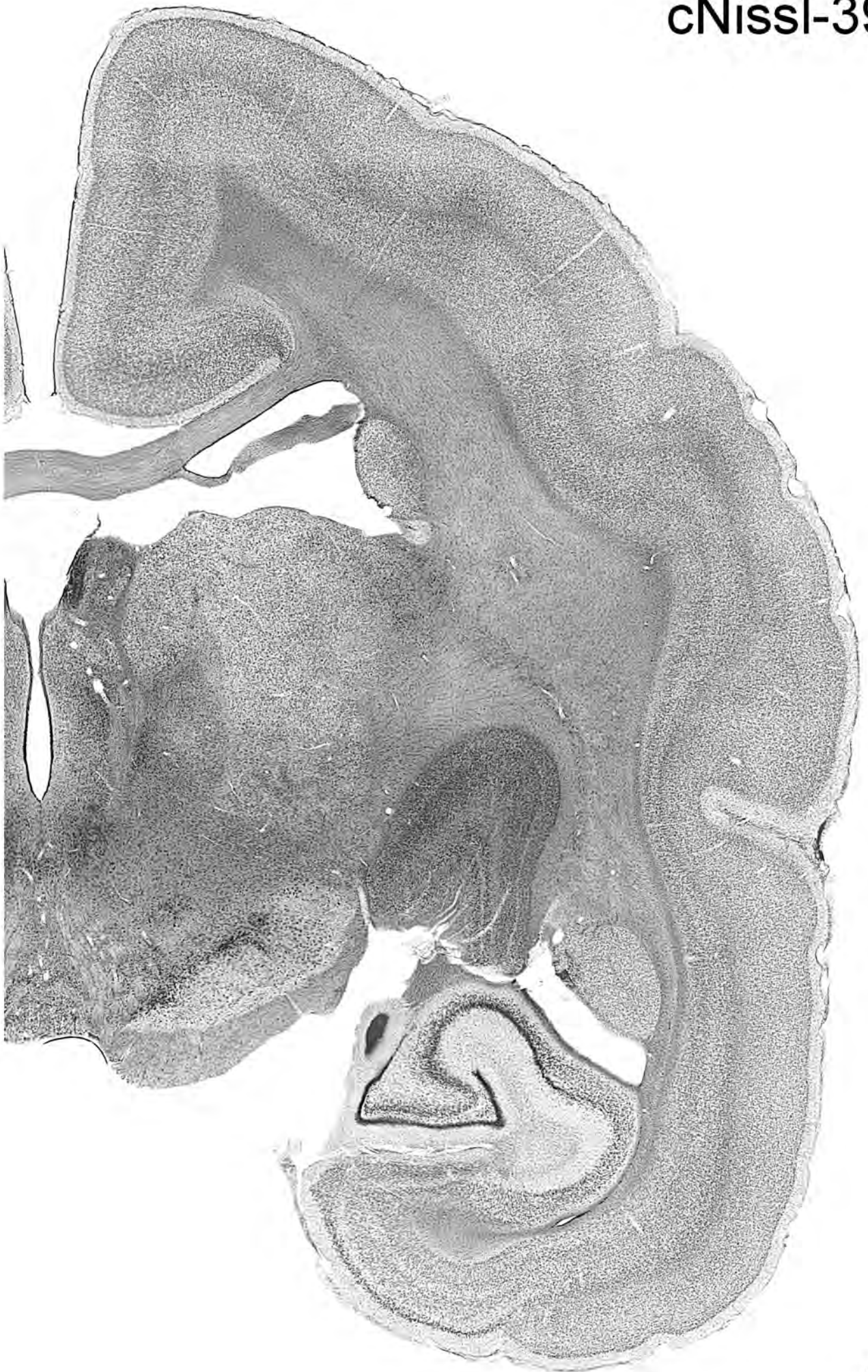
7, 20, 21, 23, 42, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; A2, secondary auditory region; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CL, central lateral thalamic nucleus; Cl, claustrum; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; Er, entorhinal cortex; EW, Edinger-Westphal nucleus; f, fornix; H, campus Foreli; ic, internal capsule; IP, interpeduncular nucleus; ITG, inferotemporal gyrus; LG, lateral geniculate nucleus; LHb, lateral habenular nucleus; LP, lateral posterior nucleus; MD, mediodorsal thalamic nucleus; MHb, medial habenular nucleus; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; Pu, putamen; PV, paraventricular thalamic nucleus; RO, radiatio optica; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STS, superior temporal sulcus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; VTA, ventral tegmental area.

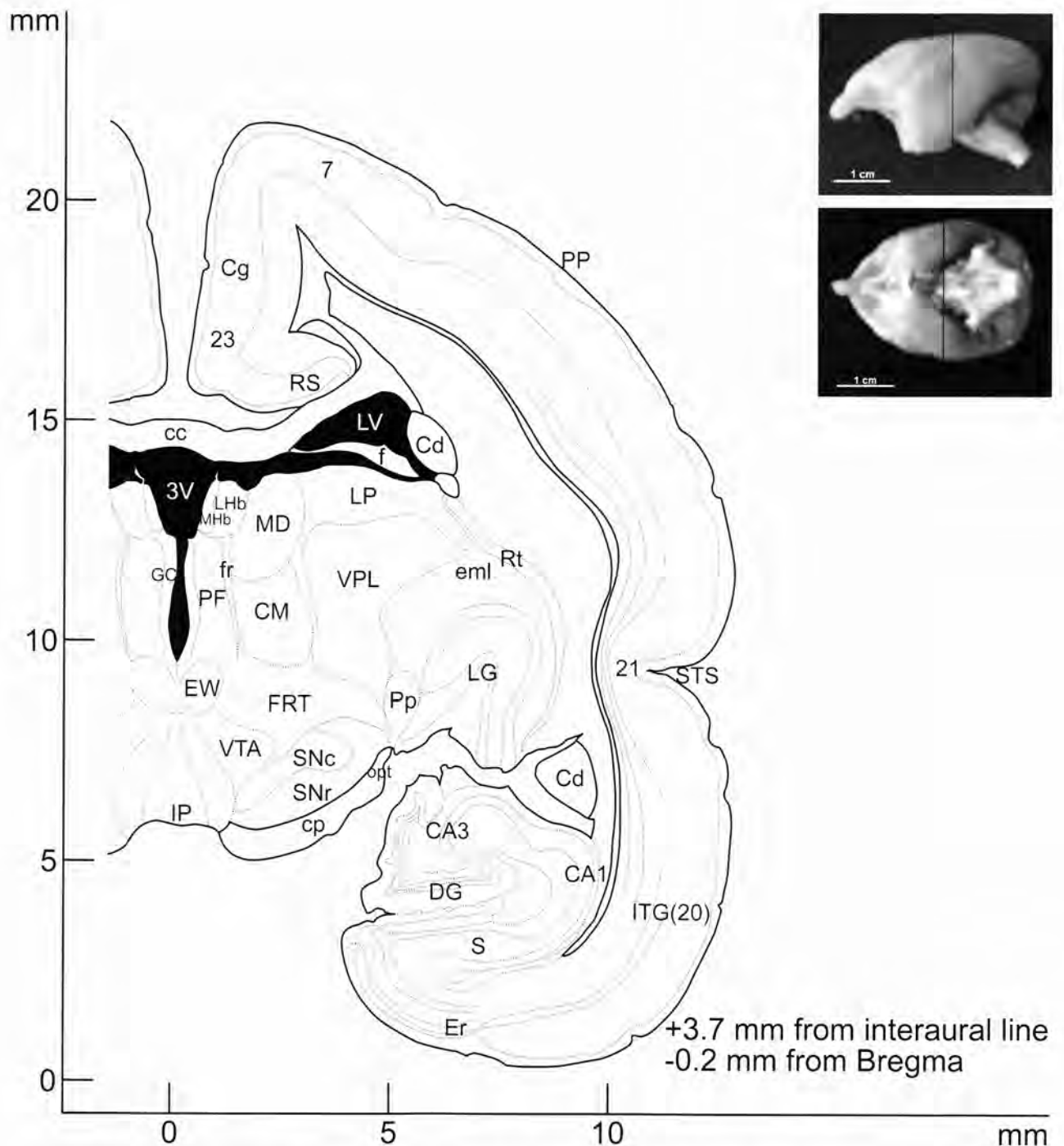
cNissl-38





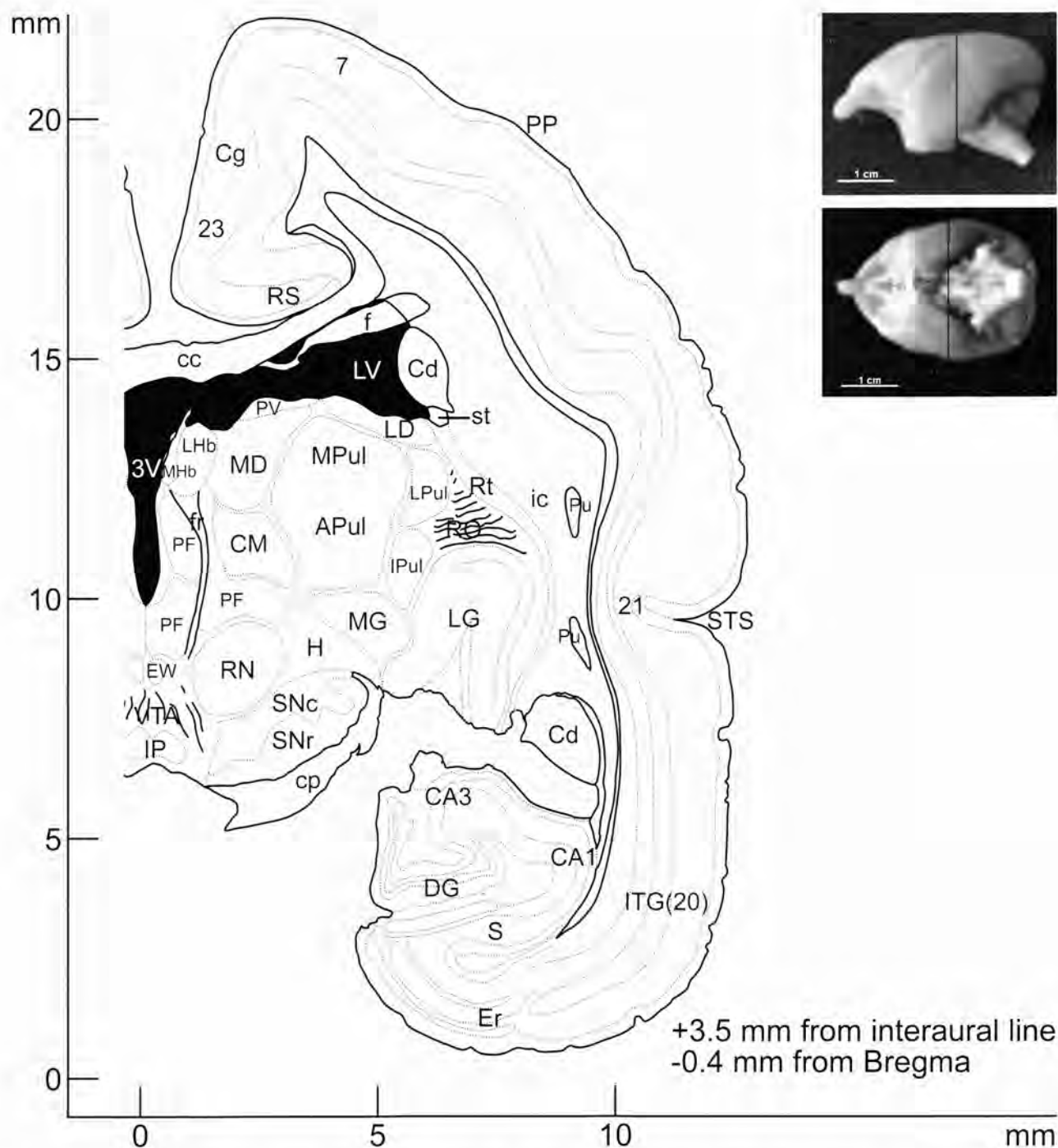
7, 20, 21, 23, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; AP, anterior pulvinar; Aq, aqueduct; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; eml, external medullary lamina; Er, entorhinal cortex; EW, Edinger-Westphal nucleus; f, fornix; FRT, formatio reticularis tegmenti; GC, substantia grisea centralis; IP, interpeduncular nucleus; ITG, inferotemporal gyrus; LG, lateral geniculate nucleus; LHb, lateral habenular nucleus; LP, lateral posterior nucleus; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; MHb, medial habenular nucleus; opt, optic tract; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STS, superior temporal sulcus; VPL, ventral posterolateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; VTA, ventral tegmental area.





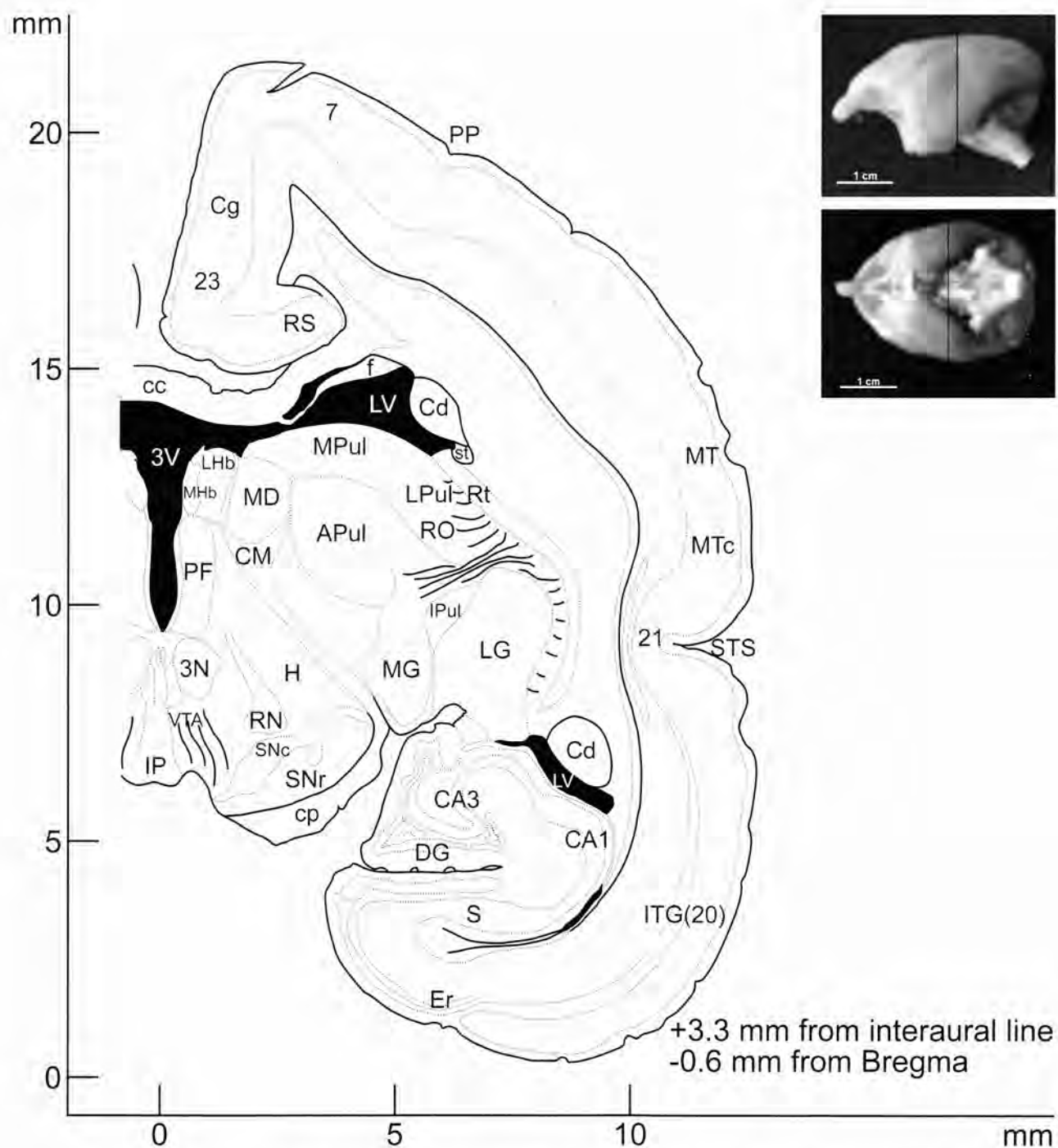
7, 20, 21, 23, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; eml, external medullary lamina; Er, entorhinal cortex; EW, Edinger-Westphal nucleus; f, fornix; fr, fasciculus retroflexus; FRT, formatio reticularis tegmenti; GC, substantia grisea centralis; IP, interpeduncular nucleus; ITG, inferotemporal gyrus; LG, lateral geniculate nucleus; LHb, lateral habenular nucleus; LP, lateral posterior nucleus; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; MHb, medial habenular nucleus; opt, optic tract; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; Pp, peripeduncular nucleus; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STS, superior temporal sulcus; VPL, ventral posterolateral thalamic nucleus; VTA, ventral tegmental area.





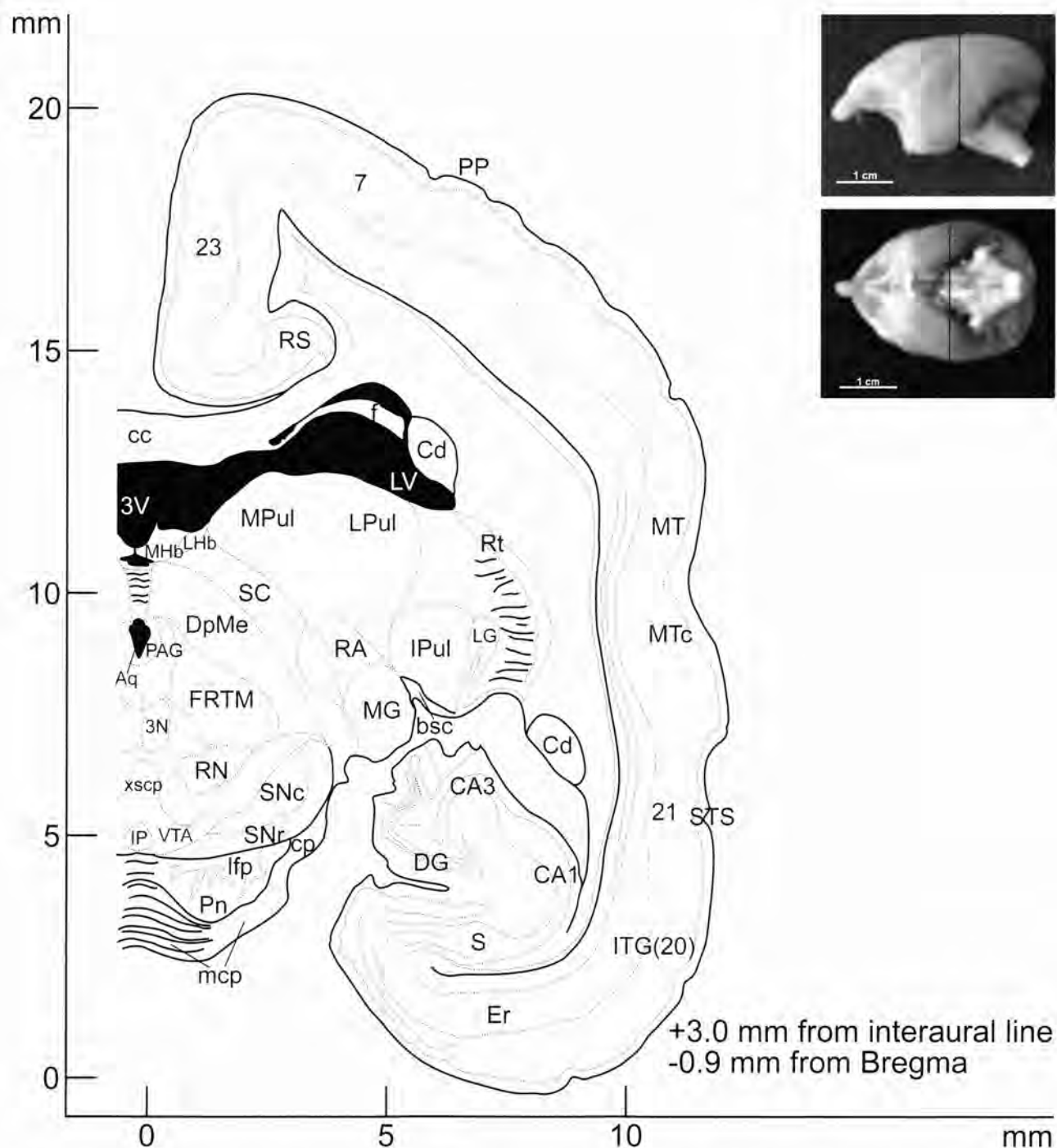
7, 20, 21, 23, Brodmann's parcellation of the cortex; 3V, 3rd ventricle; Apul, anterior pulvinar; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; Er, entorhinal cortex; EW, Eginger-Westphal nucleus; f, fornix; fr, fasciculus retroflexus; H, campus Foreli; ic, internal capsule; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; LD, lateral dorsal thalamic nucleus; LG, lateral geniculate nucleus; LHb, lateral habenular nucleus; LPul, lateral pulvinar; LV, lateral ventricle; MD, medio-dorsal thalamic nucleus; MG, medial geniculate nucleus; MHb, medial habenular nucleus; MPul, medial pulvinar; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; Pu, putamen; PV, paraventricular thalamic nucleus; RN, red nucleus; RO, radiatio optica; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; st, stria terminalis; STS, superior temporal sulcus; VTA, ventral tegmental area.



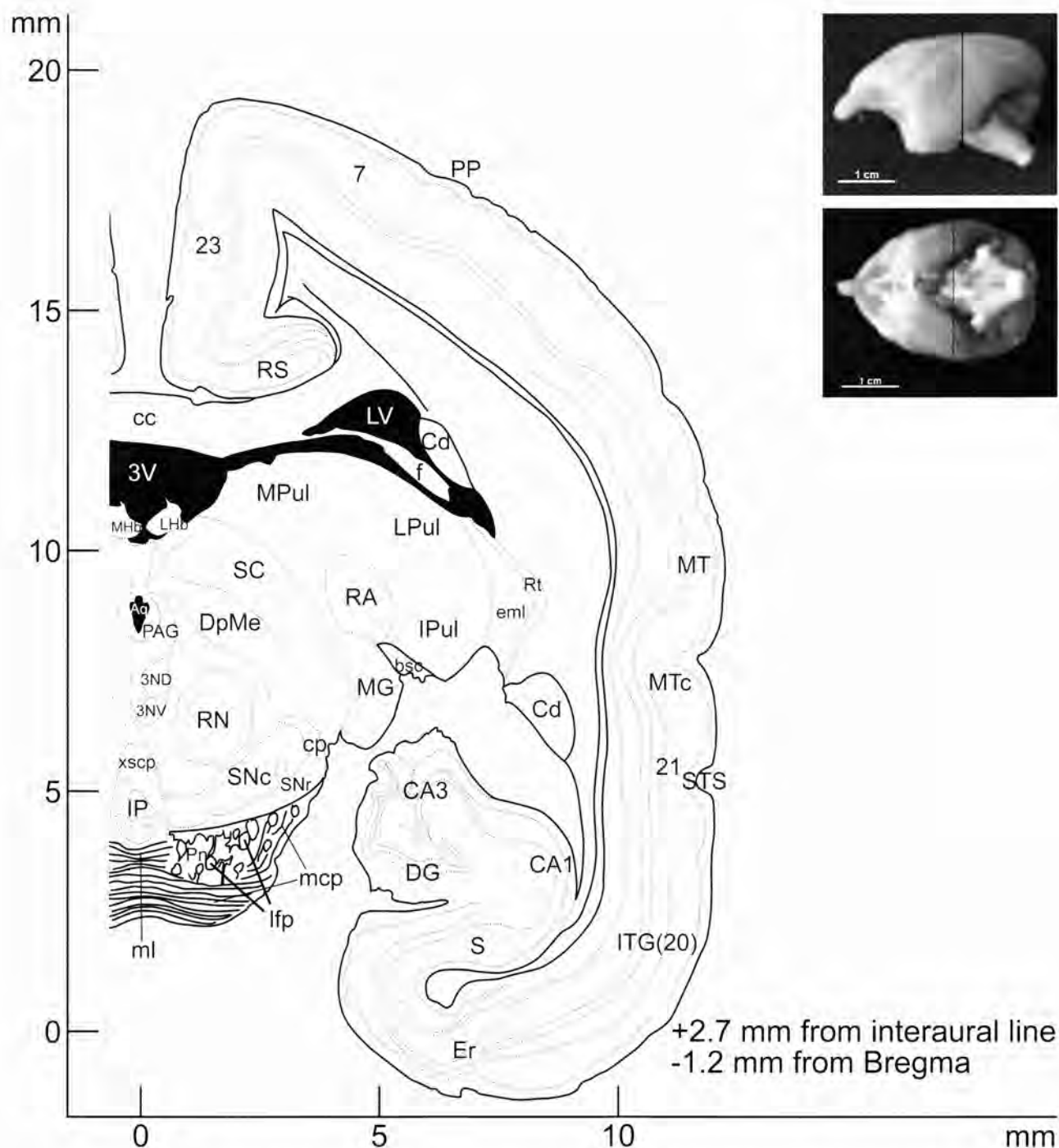


7, 20, 21, 23, Brodmann's parcellation of the cortex; 3N, oculomotor nucleus; 3V, 3rd ventricle; Apul, anterior pulvinar; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; Cg, cingulate cortex; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; Er, entorhinal cortex; f, fornix; H, campus Foreli; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; LG, lateral geniculate nucleus; LHb, lateral habenular nucleus; LPul, lateral pulvinar; LV, lateral ventricle; MD, mediodorsal thalamic nucleus; MG, medial geniculate nucleus; MHb, medial habenular nucleus; MPul, medial pulvinar; MT, Middle temporal visual area; MTc, Middle temporal crescent visual area; PF, parafascicular thalamic nucleus; PP, posterior parietal cortex; RN, red nucleus; RO, radiatio optica; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; st, stria terminalis; STS, superior temporal sulcus; VTA, ventral tegmental area.



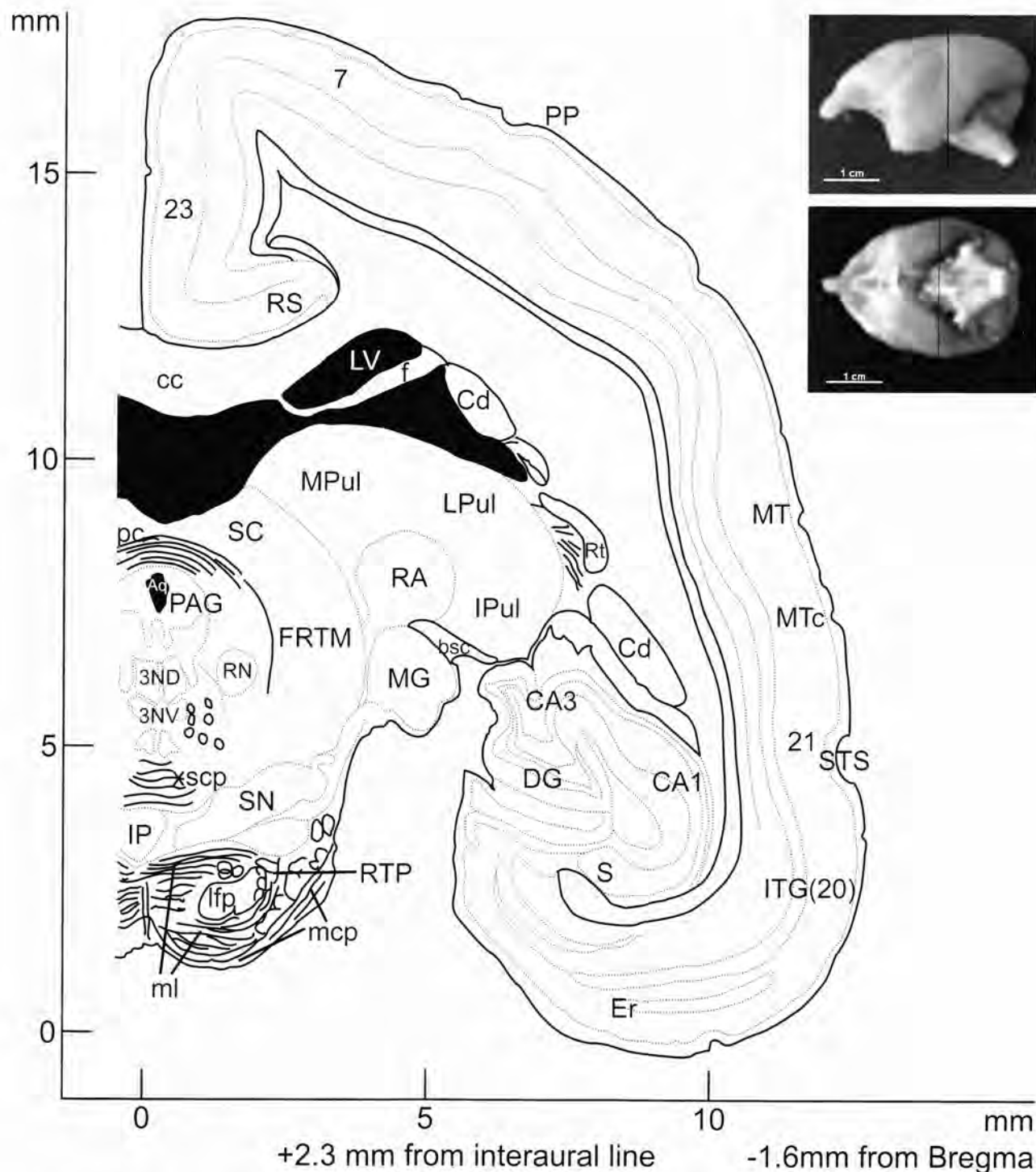




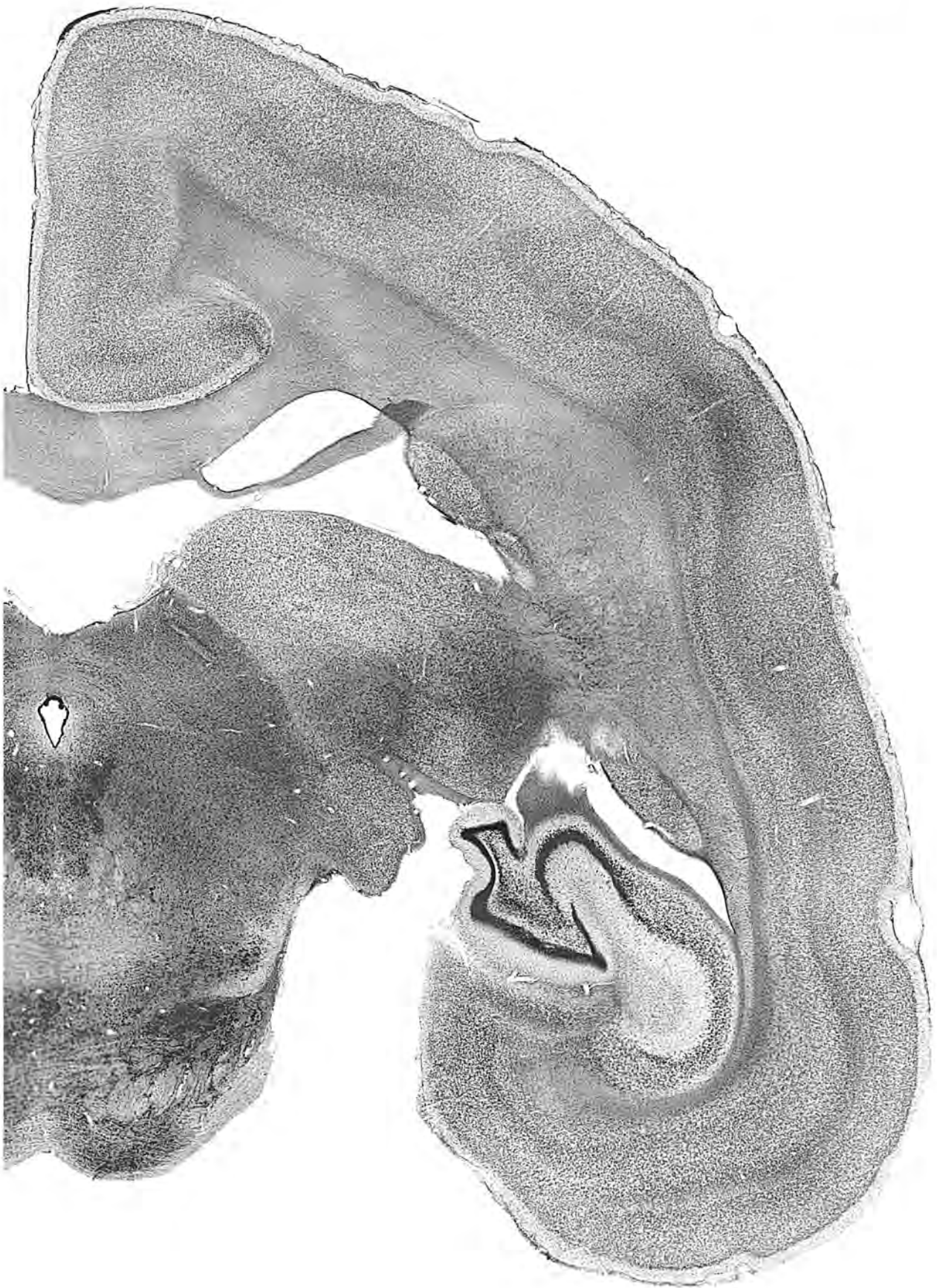


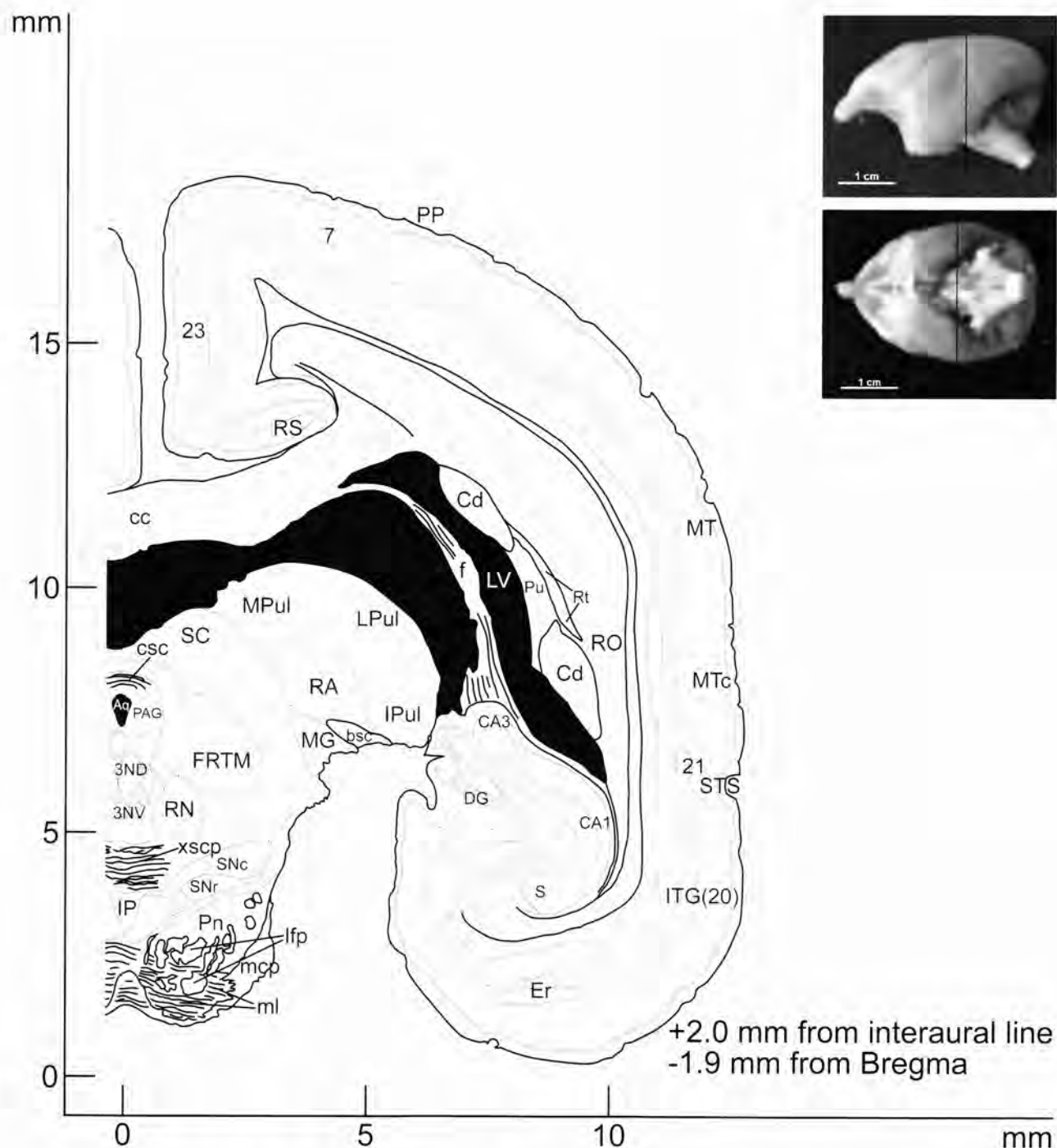
7, 20, 21, 23, Brodmann's parcellation of the cortex; 3ND, oculomotor nucleus, dorsal part; 3NV, oculomotor nucleus, ventral part; 3V, 3rd ventricle; Aq, aqueduct; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; cp, cerebral peduncle, basal part; DG, dentate gyrus; DpMe, deep mesencephalic nucleus; eml, external medullary lamina; Er, entorhinal cortex; f, fornix; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LHb, lateral habenular nucleus; LPul, lateral pulvinar; mcp, middle cerebellar peduncle; MG, medial geniculate nucleus; MHb, medial habenular nucleus; ml, medial lemniscus; MPul, medial pulvinar; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; PP, posterior parietal cortex; RA, radiatio acustica; RN, red nucleus; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SC, superior colliculus; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STS, superior temporal sulcus; xscp, decussation of the superior cerebellar peduncle.





7, 20, 21, 23, Brodmann's parcellation of the cortex; 3ND, oculomotor nucleus, dorsal part; 3NV, oculomotor nucleus, ventral part; Aq, aqueduct; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; DG, dentate gyrus; Er, entorhinal cortex; f, fornix; FRTM, formatio reticularis tegmenti mesencephali; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LPul, lateral pulvinar; LV, lateral ventricle; mcp, middle cerebellar peduncle; MG, medial geniculate nucleus; ml, medial lemniscus; MPul, medial pulvinar; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; pc, posterior commissure; PP, posterior parietal cortex; RA, radiatio acustica; RN, red nucleus; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; RTP, nucleus reticularis tegmenti pontis; S, subiculum; SC, superior colliculus; SN, substantia nigra; STS, superior temporal sulcus; xscp, decussation of the superior cerebellar peduncle.



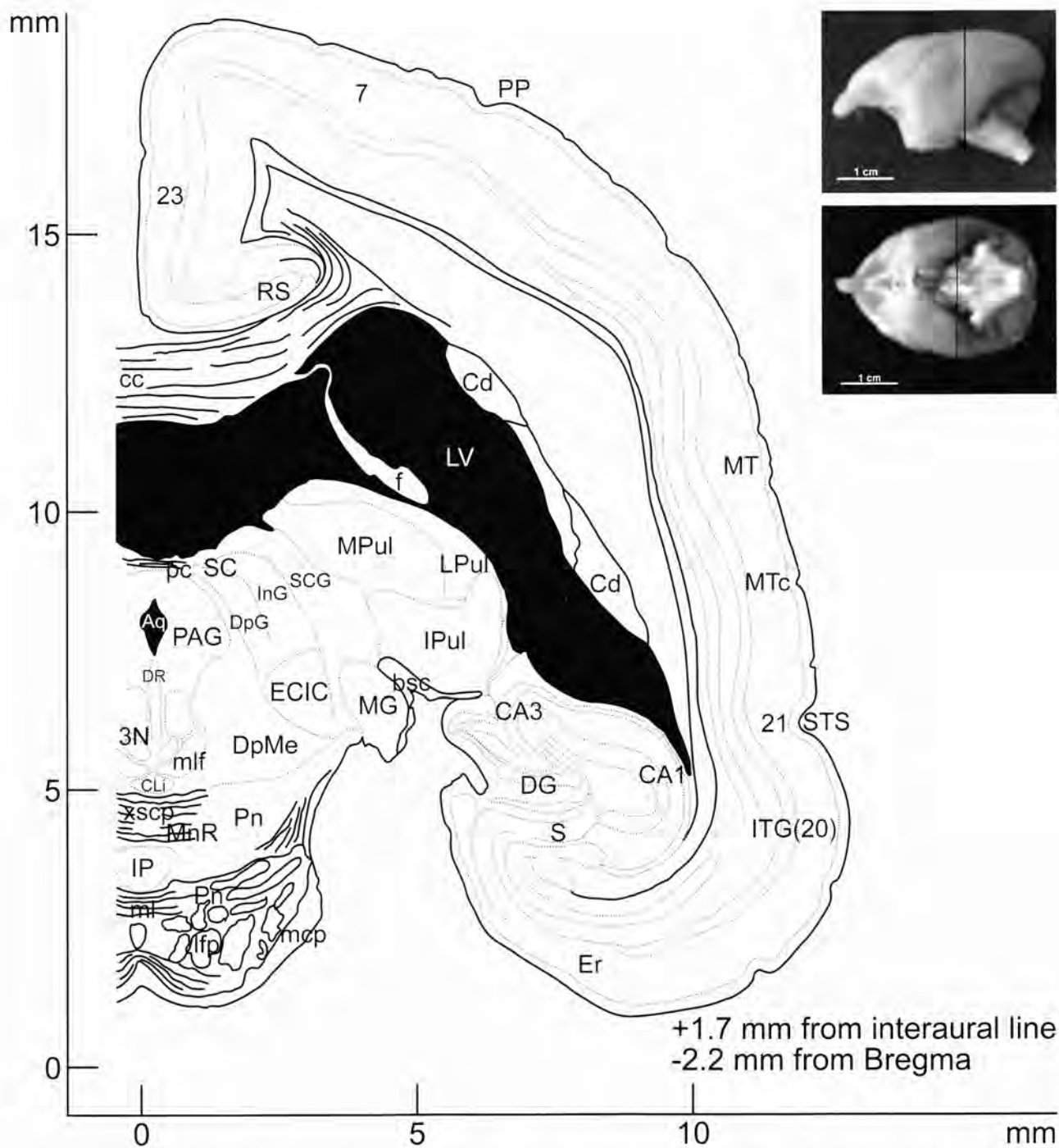


7, 20, 21, 23, Brodmann's parcellation of the cortex; 3ND, oculomotor nucleus, dorsal part; 3NV, oculomotor nucleus, ventral part; Aq, aqueduct; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; csc, commissure of the superior colliculus; DG, dentate gyrus; Er, entorhinal cortex; f, fornix; FRTM, formatio reticularis tegmenti mesencephali; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LPul, lateral pulvinar; LV, lateral ventricle; mcp, middle cerebellar peduncle; MG, medial geniculate nucleus; ml, medial lemniscus; MPul, medial pulvinar; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; PP, posterior parietal cortex; Pu, putamen; RA, radiatio acustica; RN, red nucleus; RO, radiatio optica; RS, retrosplenial cortex; Rt, reticular thalamic nucleus; S, subiculum; SC, superior colliculus; SNc, substantia nigra, compact; SNr, substantia nigra, reticular part; STS, superior temporal sulcus; xscp, decussation of the superior cerebellar peduncle.

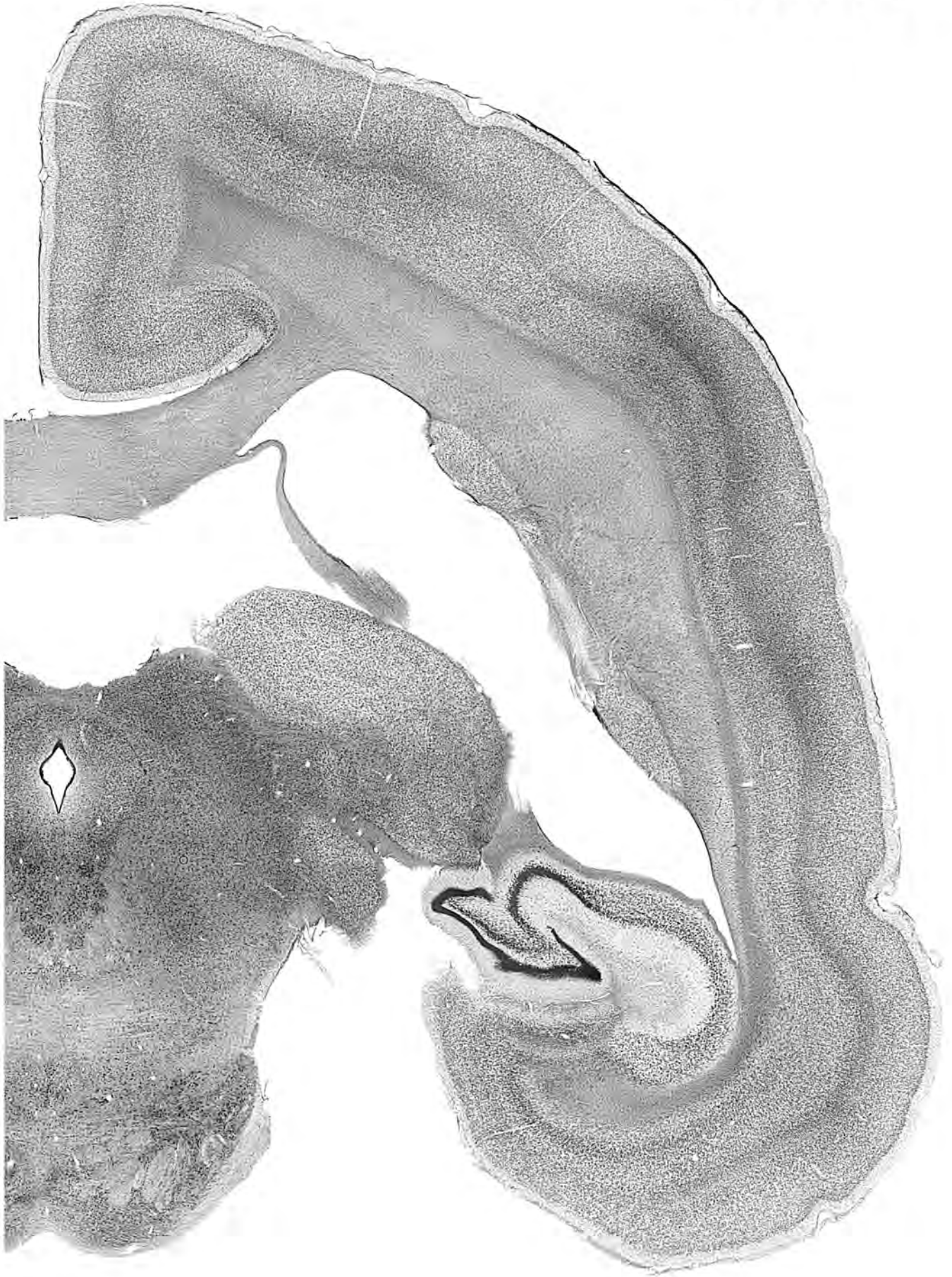
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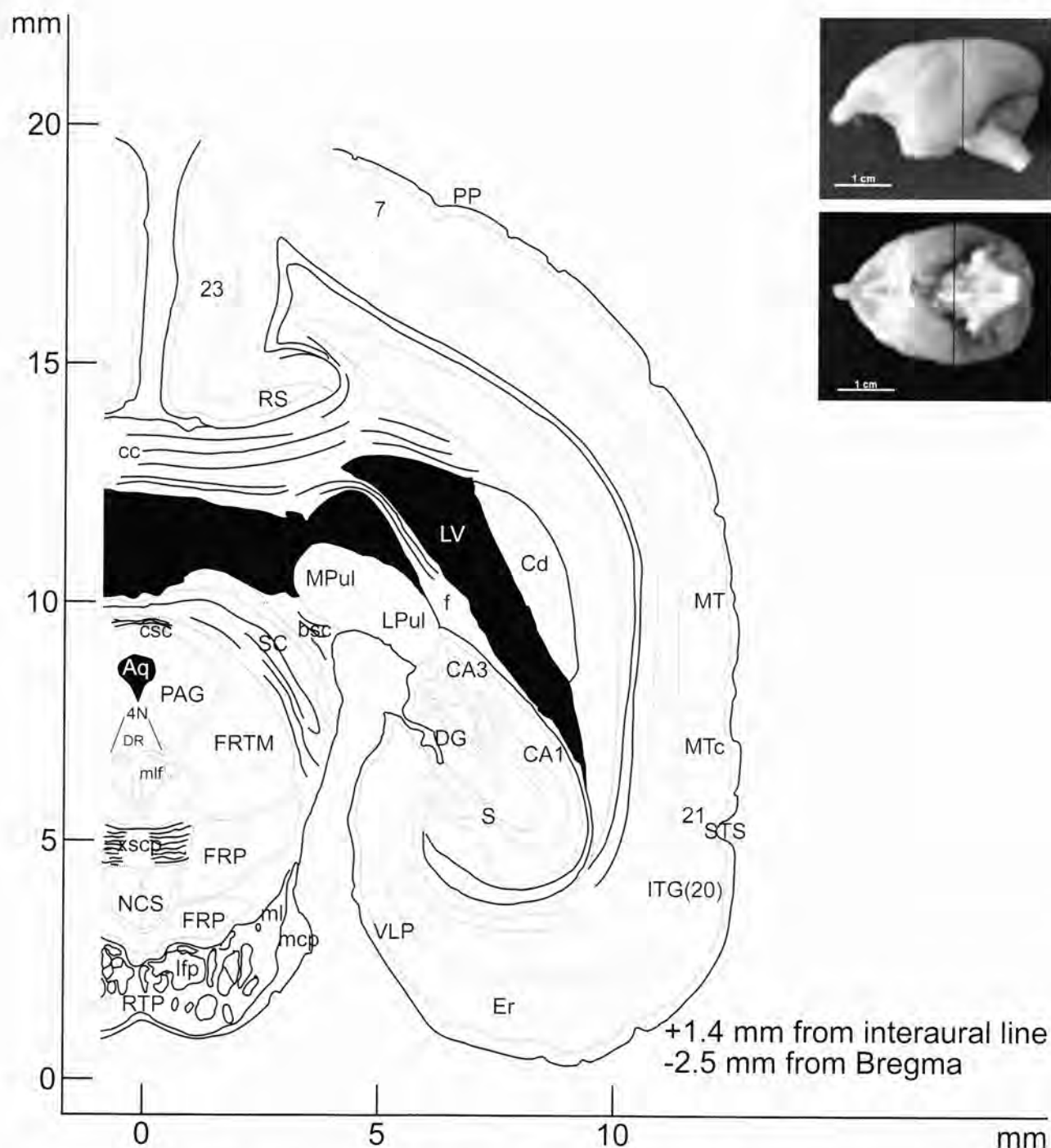


cTr-47



7, 20, 21, 23, Brodmann's parcellation of the cortex; 3N, oculomotor nucleus; Aq, aqueduct; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; CLi, caudal linear nucleus of the raphe; DG, dentate gyrus; DpG, deep gray layer; DpMe, deep mesencephalic nucleus; DR, dorsal raphe nucleus; ECIC, external cortex of the inferior colliculus; Er, entorhinal cortex; f, fornix; InG, intermediate gray layer; IP, interpeduncular nucleus; IPul, inferior pulvinar; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LPul, lateral pulvinar; LV, lateral ventricle; mcp, middle cerebellar peduncle; MG, medial geniculate nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MnR, median raphe nucleus; MPul, medial pulvinar; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; pc, posterior commissure; Pn, pontine nuclei; PP, posterior parietal cortex; RS, retrosplenial cortex; S, subiculum; SC, superior colliculus; SCG, superficial gray layer of superior colliculus; STS, superior temporal sulcus; xscp, decussation of the superior cerebellar peduncle.

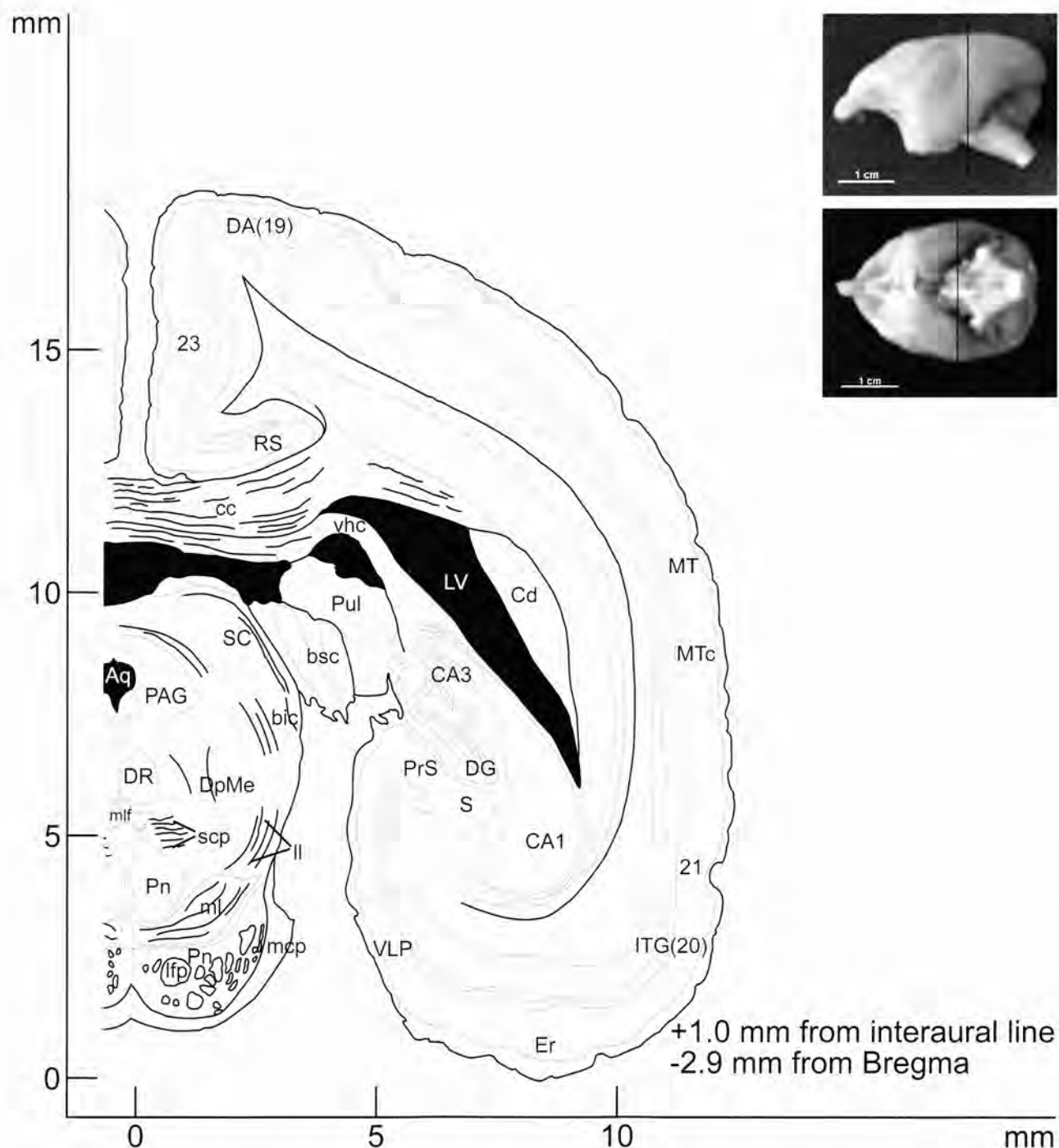




7, 20, 21, 23, Brodmann's parcellation of the cortex; 4N, trochlear nucleus; Aq, aqueduct; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; csc, commissure of the superior colliculus; DG, dentate gyrus; DR, dorsal raphe nucleus; Er, entorhinal cortex; f, fornix; FRP, formatio reticularis pontis; FRTM, formatio reticularis tegmenti mesencephali; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LPul, lateral pulvinar; LV, lateral ventricle; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MPul, medial pulvinar; MT, middle temporal visual area; MTc, middle temporal crescent visual area; NCS, central superior tegmental nucleus; PAG, periaqueductal gray; PP, posterior parietal cortex; RS, retrosplenial cortex; RTP, nucleus reticularis tegmenti pontis; S, subiculum; SC, superior colliculus; STS, superior temporal sulcus; VLP, Ventrolateral posterior extrastriate area; xscp, decussation of the superior cerebellar peduncle.

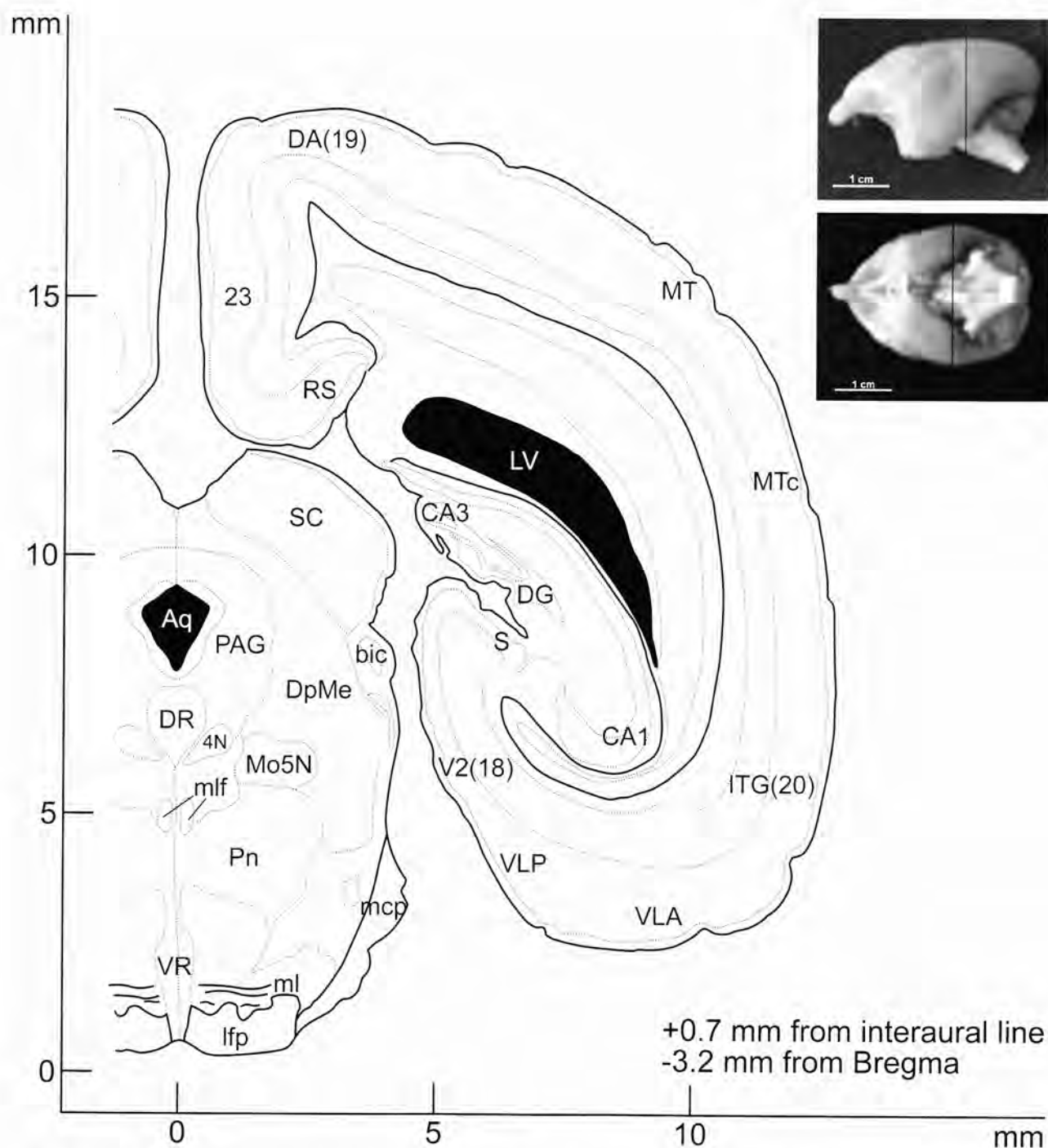


cTr-49



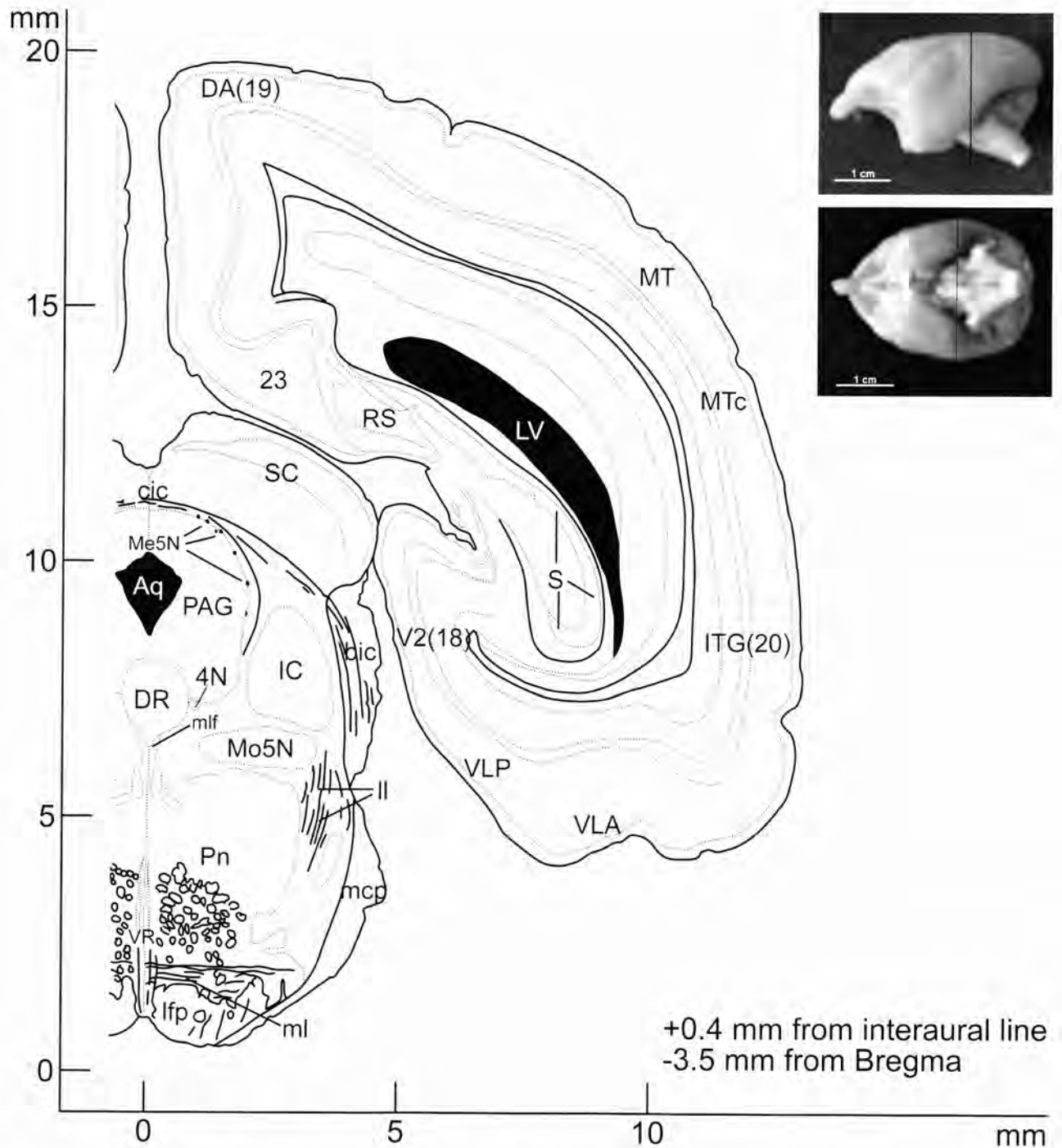
19, 20, 21, 23, Brodmann's parcellation of the cortex; Aq, aqueduct; bic, brachium of the inferior colliculus; bsc, brachium of the superior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cc, corpus callosum; Cd, caudate nucleus; DA, dorsoanterior extrastriate area; DG, dentate gyrus; DpMe, deep mesencephalic nucleus; DR, dorsal raphe nucleus; Er, entorhinal cortex; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; ll, lateral lemniscus; LV, lateral ventricle; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; PrS, presubiculum; Pul, pulvinar nuclei; RS, retrosplenial cortex; S, subiculum; SC, superior colliculus; scp, superior cerebellar peduncle(brachium conjunctivum); vhc, ventral hippocampal commissure; VLP, ventrolateral posterior extrastriate area.



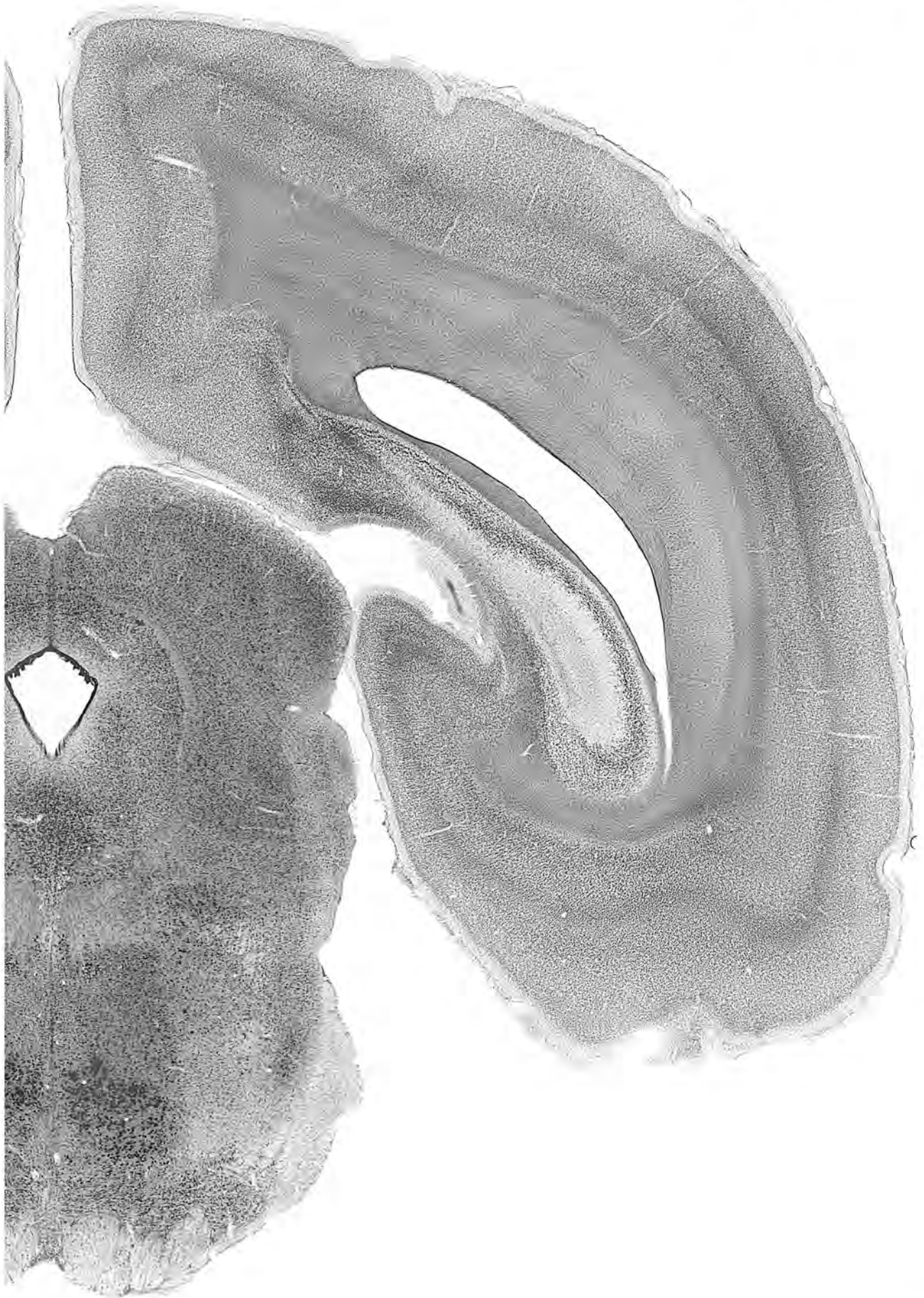


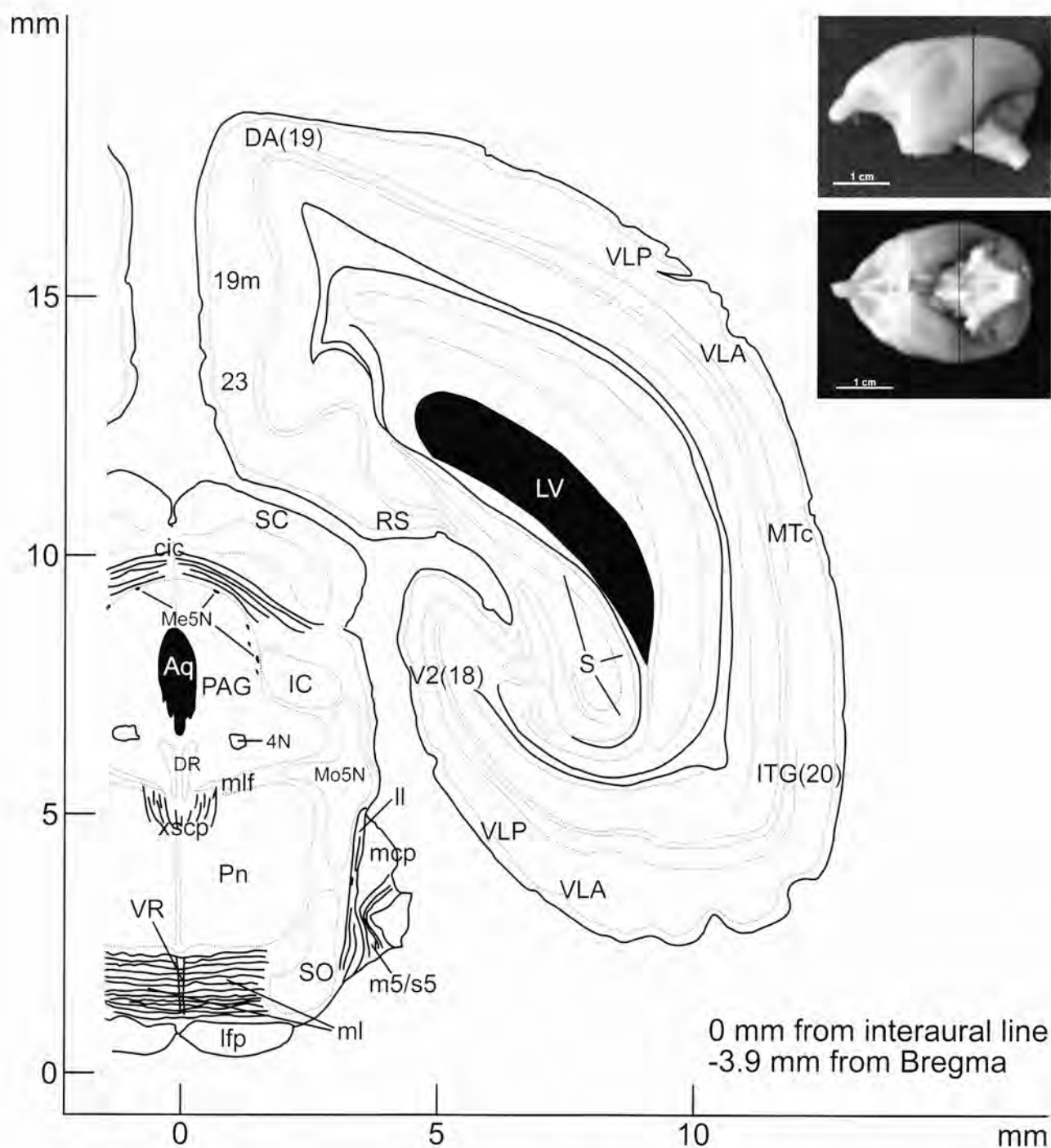
18, 19, 20, 23, Brodmann's parcellation of the cortex; 4N, trochlear nucleus; Aq, aqueduct; bic, brachium of the inferior colliculus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; DA, dorsoanterior extrastriate area; DG, dentate gyrus; DpMe, deep mesencephalic nucleus; DR, dorsal raphe nucleus; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; LV, lateral ventricle; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; Mo5N, trigeminal motor nucleus; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; RS, retrosplenial cortex; S, subiculum; SC, superior colliculus; V2, secondary visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area; VR, ventral raphe nucleus.





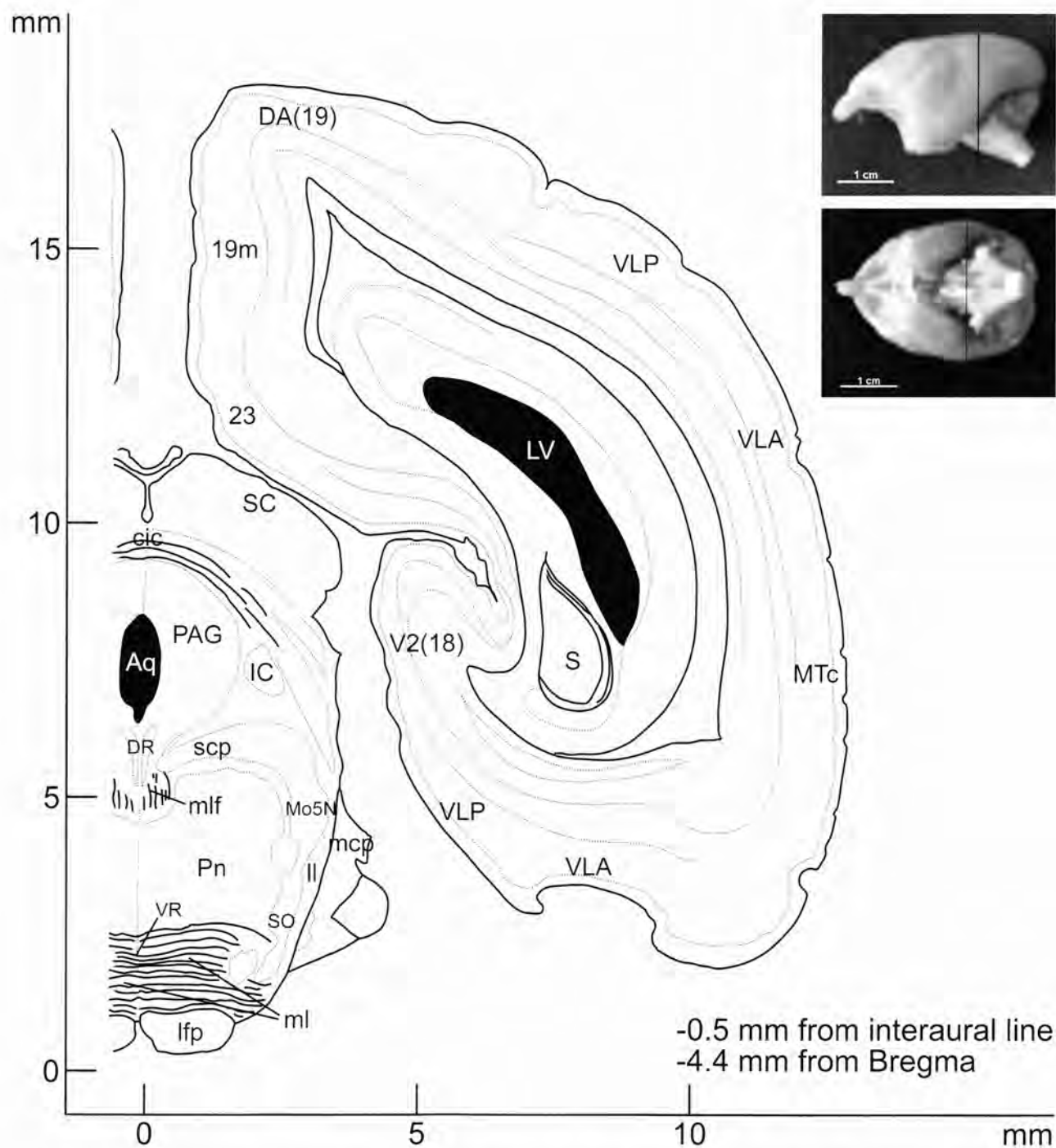
18, 19, 20, 23, Brodmann's parcellation of the cortex; 4N, trochlear nucleus; Aq, aqueduct; bic, brachium of the inferior colliculus; cic, commissure of the inferior colliculus; DA, dorsoanterior extrastriate area; DR, dorsal raphe nucleus; IC, inferior colliculus; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; ll, lateral lemniscus; LV, lateral ventricle; mcp, middle cerebellar peduncle; Me5N, mesencephalic trigeminal nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; Mo5N, trigeminal motor nucleus; MT, middle temporal visual area; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; RS, retrosplenial cortex; S, subiculum; SC, superior colliculus; V2, second visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area; VR, ventral raphe nucleus.



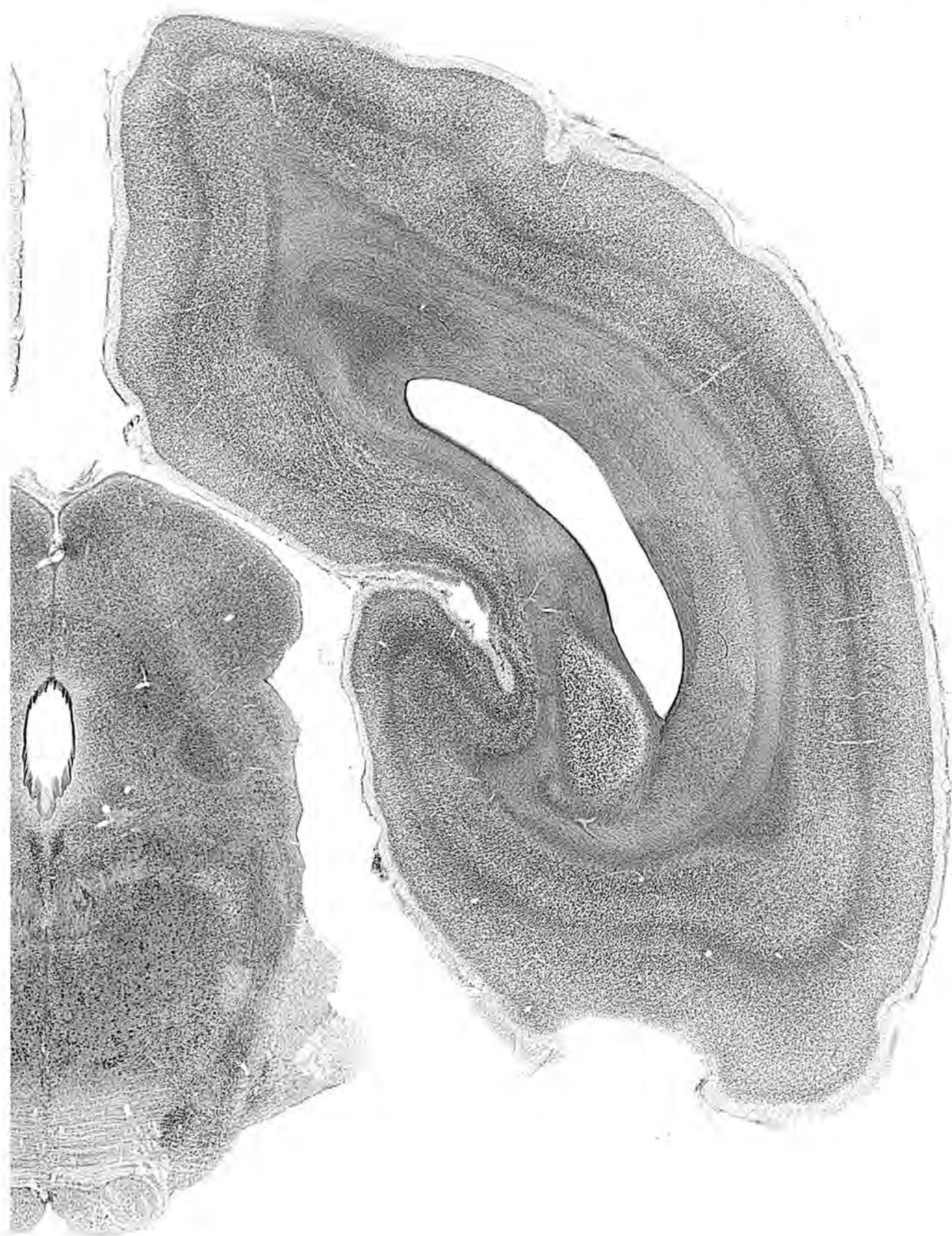


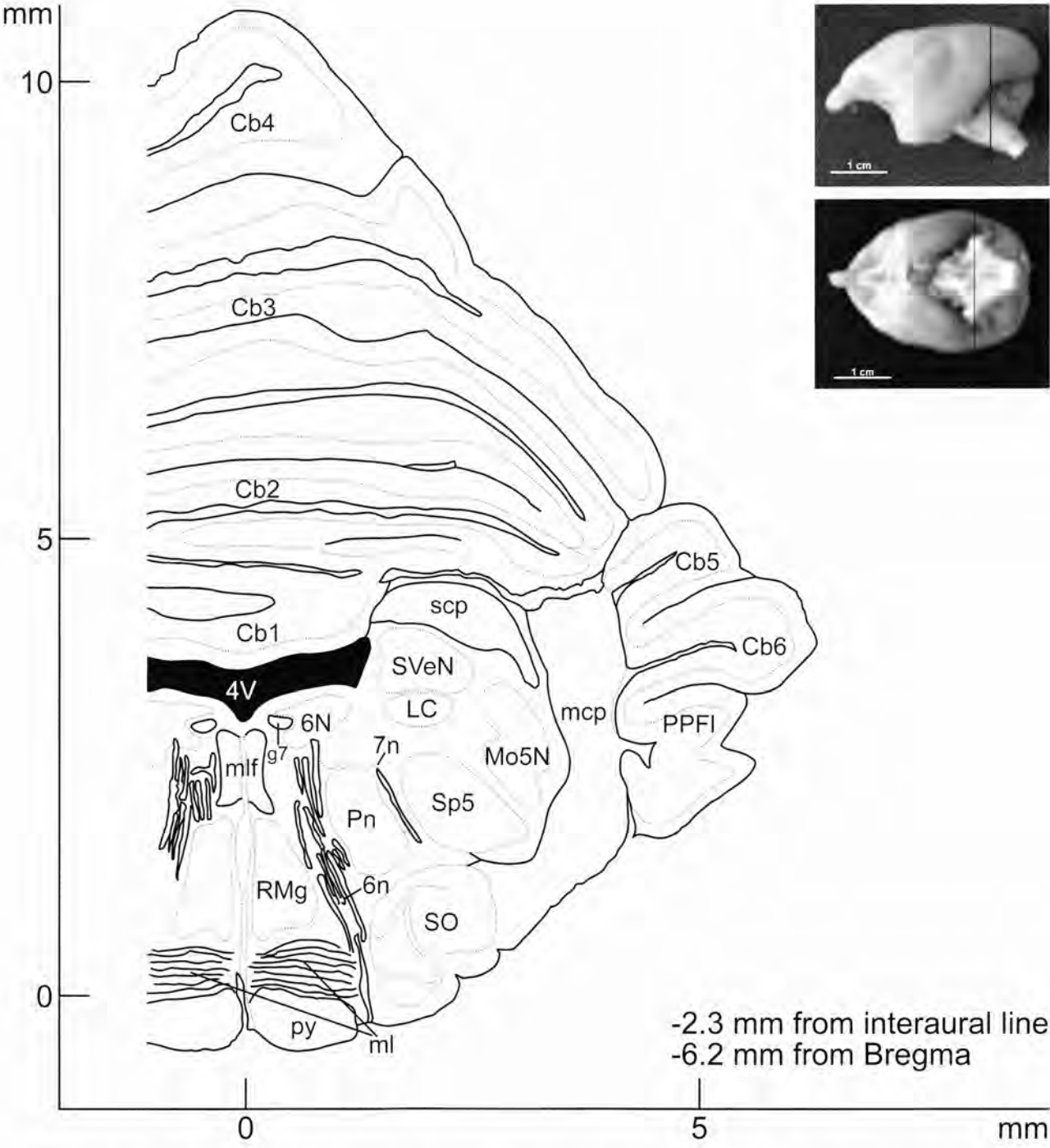
18, 19, 19m, 20, 23, Brodmann's parcellation of the cortex; 4N, trochlear nucleus; Aq, aqueduct; cic, commissure of the inferior colliculus; DA, dorsoanterior extrastriate area; DR, dorsal raphe nucleus; IC, inferior colliculus; ITG, inferotemporal gyrus; lfp, longitudinal fasciculus of the pons; II, lateral lemniscus; LV, lateral ventricle; m5/s5, motor root of the trigeminal nerve/sensory root of the trigeminal nerve; mcp, middle cerebellar peduncle; Me5N, mesencephalic trigeminal nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; Mo5N, trigeminal motor nucleus; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; RS, retrosplenial cortex; S, subiculum; SC, superior colliculus; SO, superior olive; V2, second visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area; VR, ventral raphe nucleus; xscp, decussation of the superior cerebellar peduncle.





18, 19, 19m, 23, Brodmann's parcellation of the cortex; Aq, aqueduct; cic, commissure of the inferior colliculus; DA, dorsoanterior extrastriate area; DR, dorsal raphe nucleus; IC, inferior colliculus; lfp, longitudinal fasciculus of the pons; ll, lateral lemniscus; LV, lateral ventricle; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; Mo5N, trigeminal motor nucleus; MTc, middle temporal crescent visual area; PAG, periaqueductal gray; Pn, pontine nuclei; S, subiculum; SC, superior colliculus; scp, superior cerebellar peduncle(brachium conjunctivum); SO, superior olive; V2, second visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area; VR, ventral raphe nucleus.



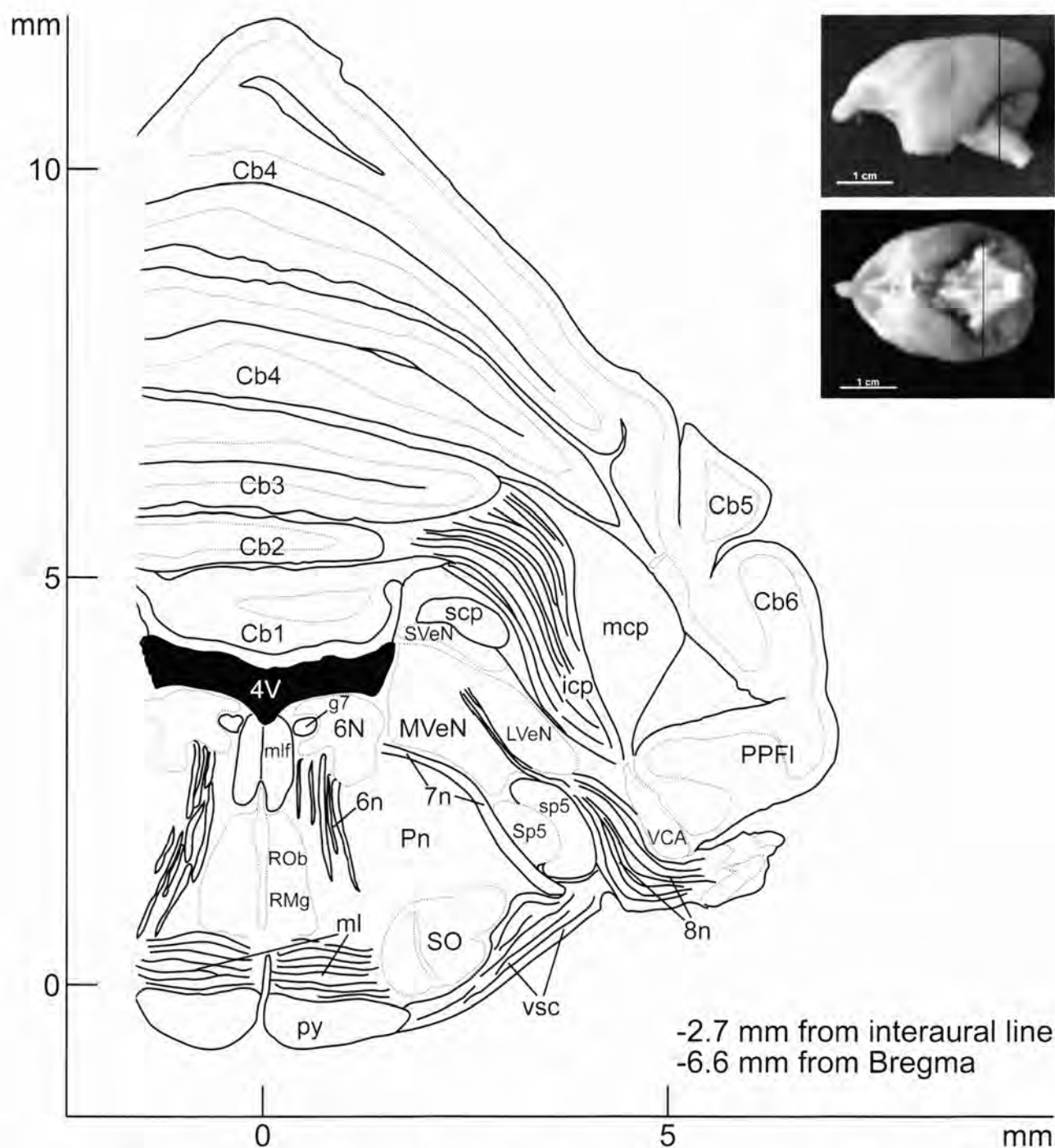


4V, 4th ventricle ; 6N, abducens nucleus; 6n, root of abducens nerve; 7n, facial nerve; Cb1, cerebellar lobule 1; Cb2, cerebellar lobule 2; Cb3, cerebellar lobule 3; Cb4, cerebellar lobule 4; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; g7, genu of the facial nerve; LC, locus coeruleus; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; Mo5N, motor trigeminal nucleus; Pn, pontine nuclei; PPFI, posterior paraflocculus; py, pyramidal tract; RMg, nucleus raphe magnus; scp, superior cerebellar peduncle (brachium conjunctivum); SO, superior olive; Sp5, spinal trigeminal nucleus; SVeN, superior vestibular nucleus.

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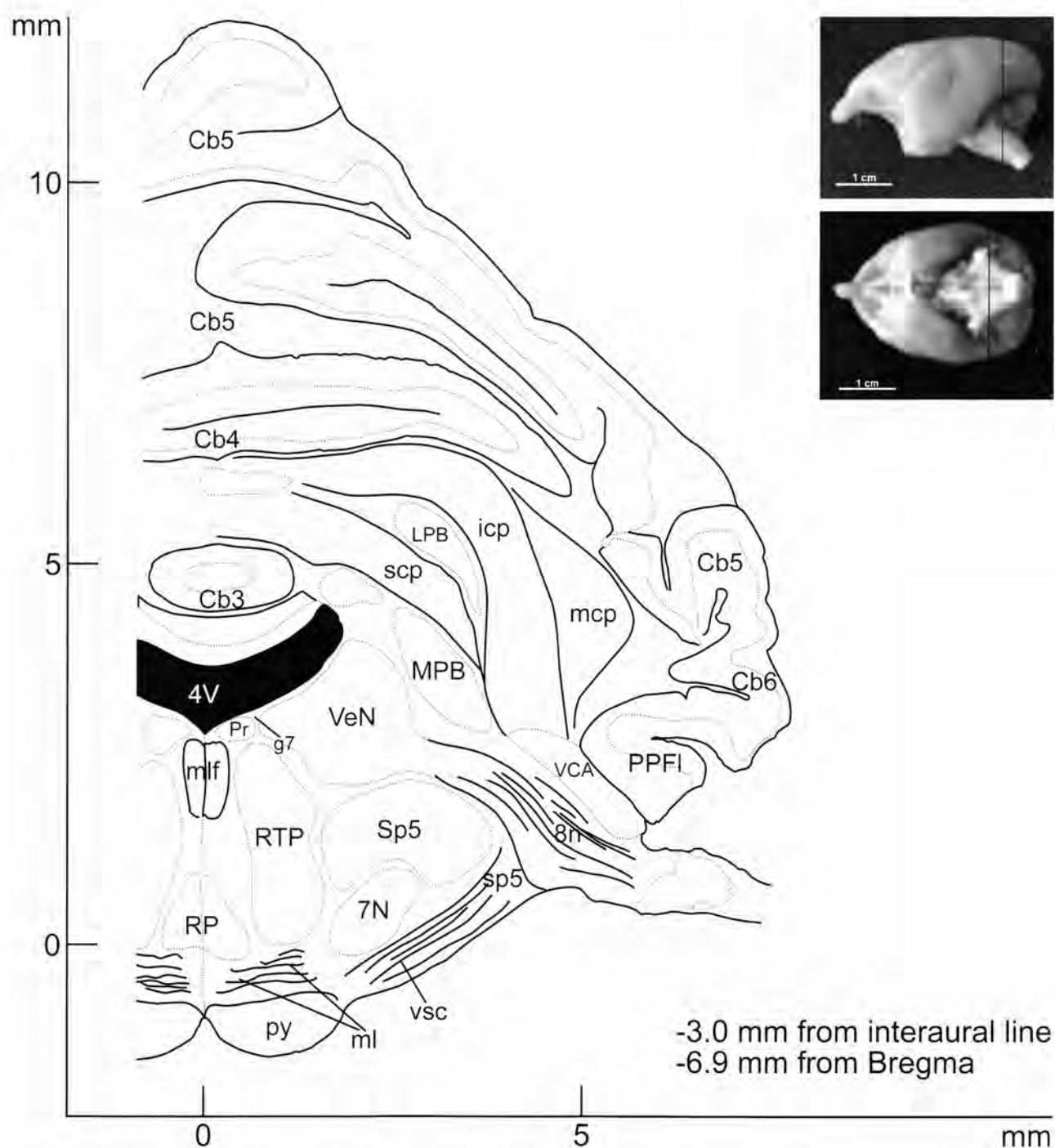
cTr-55



4V, 4th ventricle ; 6N, abducens nucleus; 6n, root of abducens nerve; 7n, facial nerve; 8n, vestibulocochlear nerve; Cb1, cerebellar lobule 1; Cb2, cerebellar lobule 2; Cb3, cerebellar lobule 3; Cb4, cerebellar lobule 4; Cb5; cerebellar lobule 5; Cb6, cerebellar lobule 6; g7, genu of the facial nerve; icp, inferior cerebellar peduncle (restiform body); LVeN, lateral vestibular nucleus; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MVeN, medial vestibular nucleus; Pn, pontine nuclei; PPFI, posterior paraflocculus; py, pyramidal tract; RMg, nucleus raphe magnus; ROb, raphe obscurus nucleus; scp, superior cerebellar peduncle (brachium conjunctivum); SO, superior olive; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; SVeN, superior vestibular nucleus; VCA, ventral cochlear nucleus, anterior part; vsc, ventral spinocerebellar tract.

cNissl-55

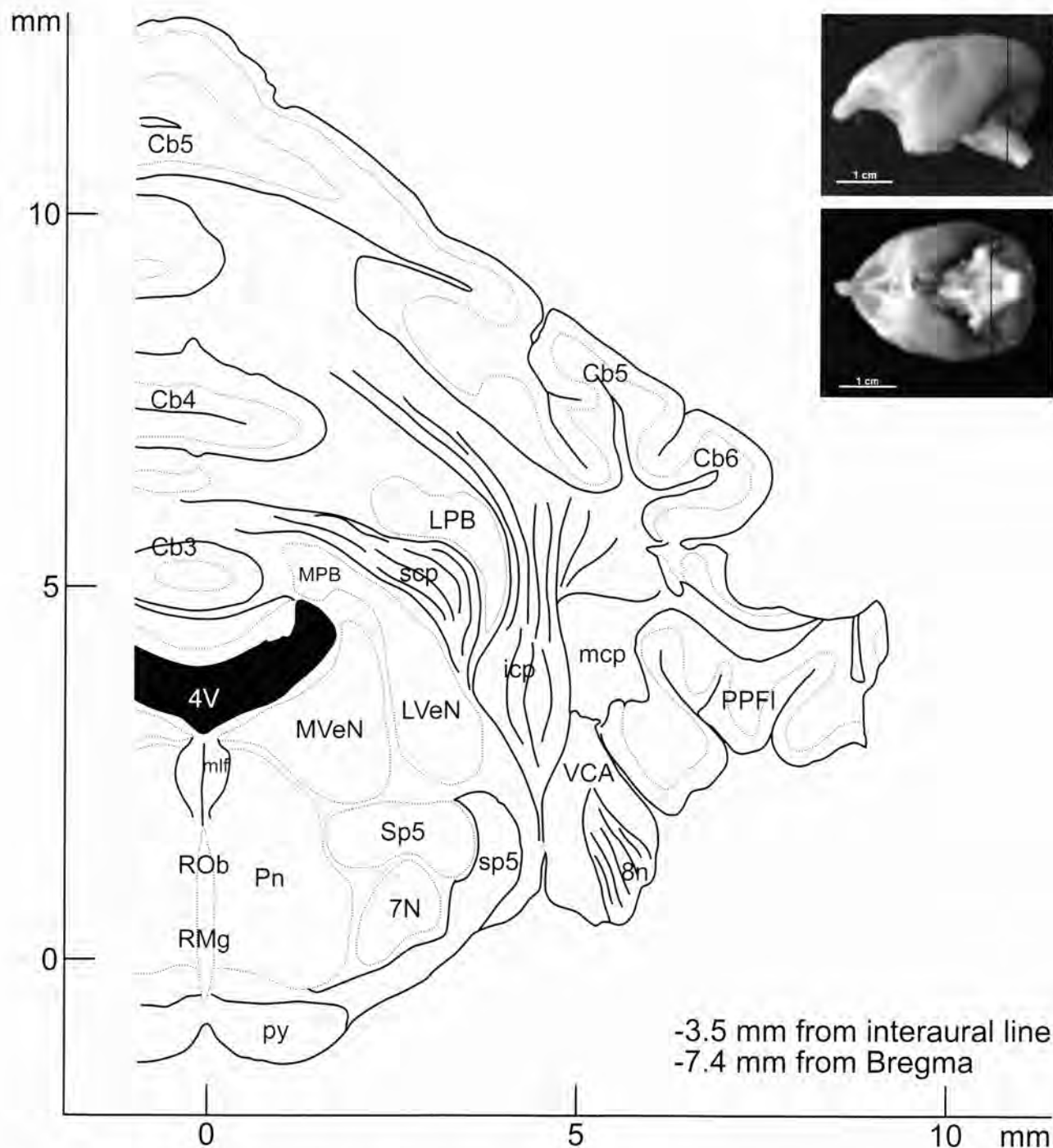




4V, 4th ventricle; 7N, facial nucleus; 8n, vestibulocochlear nerve; Cb3, cerebellar lobule 3; Cb4, cerebellar lobule 4; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; g7, genu of the facial nerve; icp, inferior cerebellar peduncle (restiform body); LPB, lateral parabrachial nucleus; mcp, middle cerebellar peduncle; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MPB, medial parabrachial nucleus; PPFI, posterior paraflocculus; Pr, prepositus nucleus; py, pyramidal tract; RP, nucleus raphe pallidus; RTP, nucleus reticularis tegmenti pontis; scp, superior cerebellar peduncle (brachium conjunctivum); Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VCA, ventral cochlear nucleus, anterior part; VeN, vestibular nuclei; vsc, ventral spinocerebellar tract.

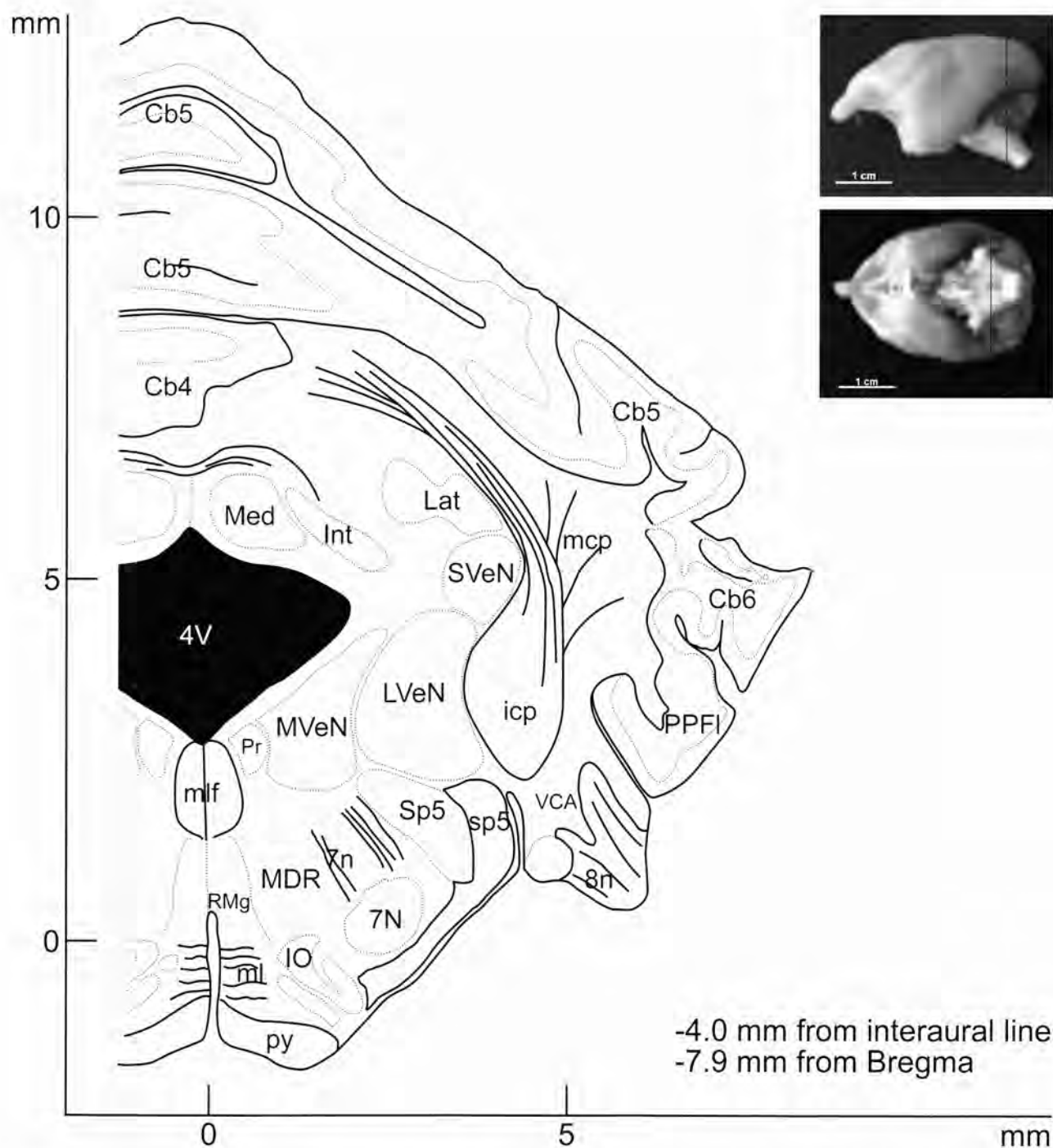


cTr-57

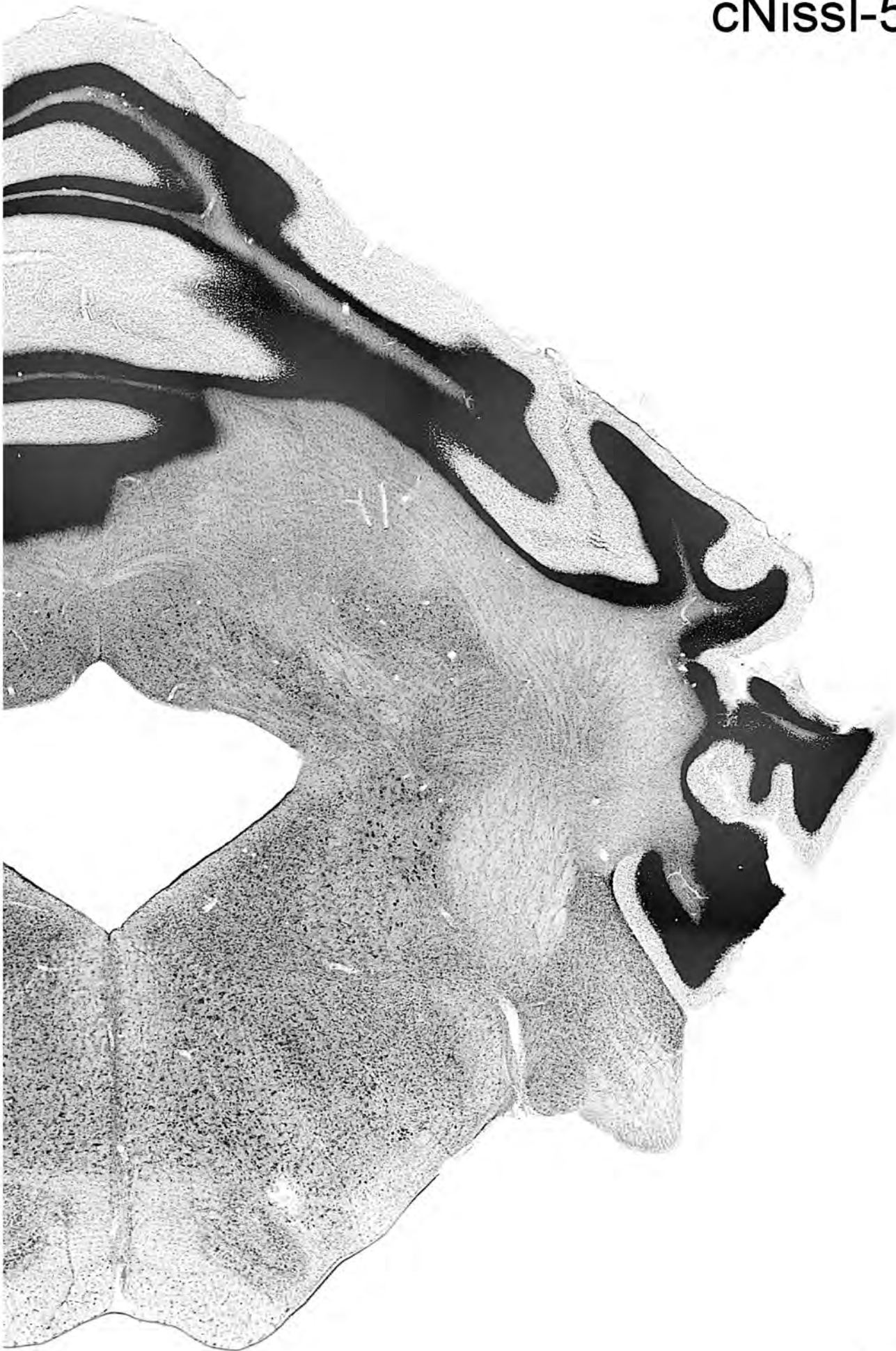


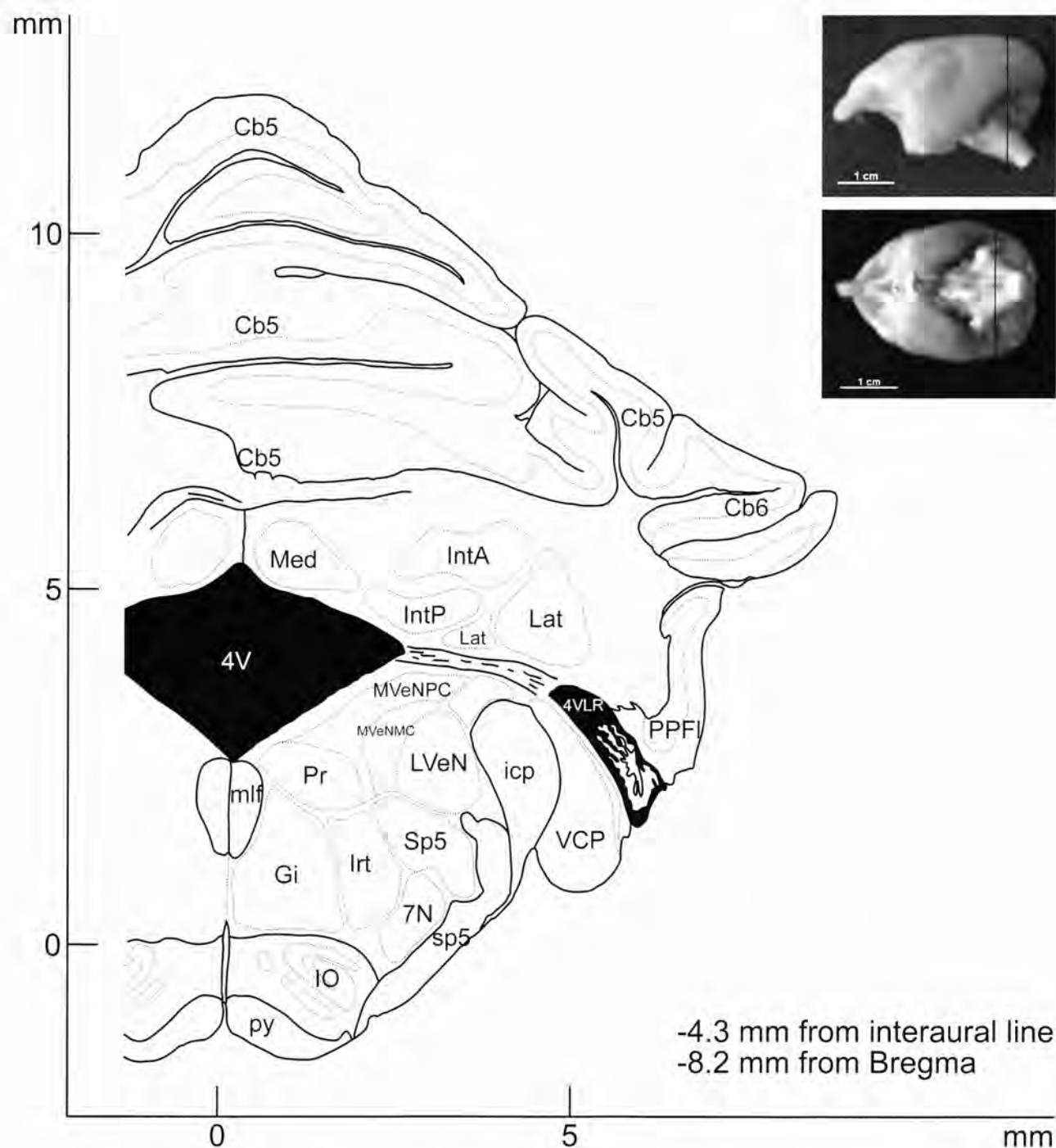
4V, 4th ventricle; 7N, facial nucleus; 8n, vestibulocochlear nerve; Cb3, cerebellar lobule 3; Cb4, cerebellar lobule 4; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; icp, inferior cerebellar peduncle (restiform body); LPB, lateral parabrachial nucleus; LVeN, lateral vestibular nucleus; mcp, middle cerebellar peduncle; mlf, medial longitudinal fasciculus; MPB, medial parabrachial nucleus; MVeN, medial vestibular nucleus; Pn, pontine nuclei; PPF, posterior paraflocculus; py, pyramidal tract; RMg, nucleus raphe magnus; ROb, raphe obscurus nucleus; scp, superior cerebellar peduncle (brachium conjunctivum); Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VCA, ventral cochlear nucleus, anterior part.





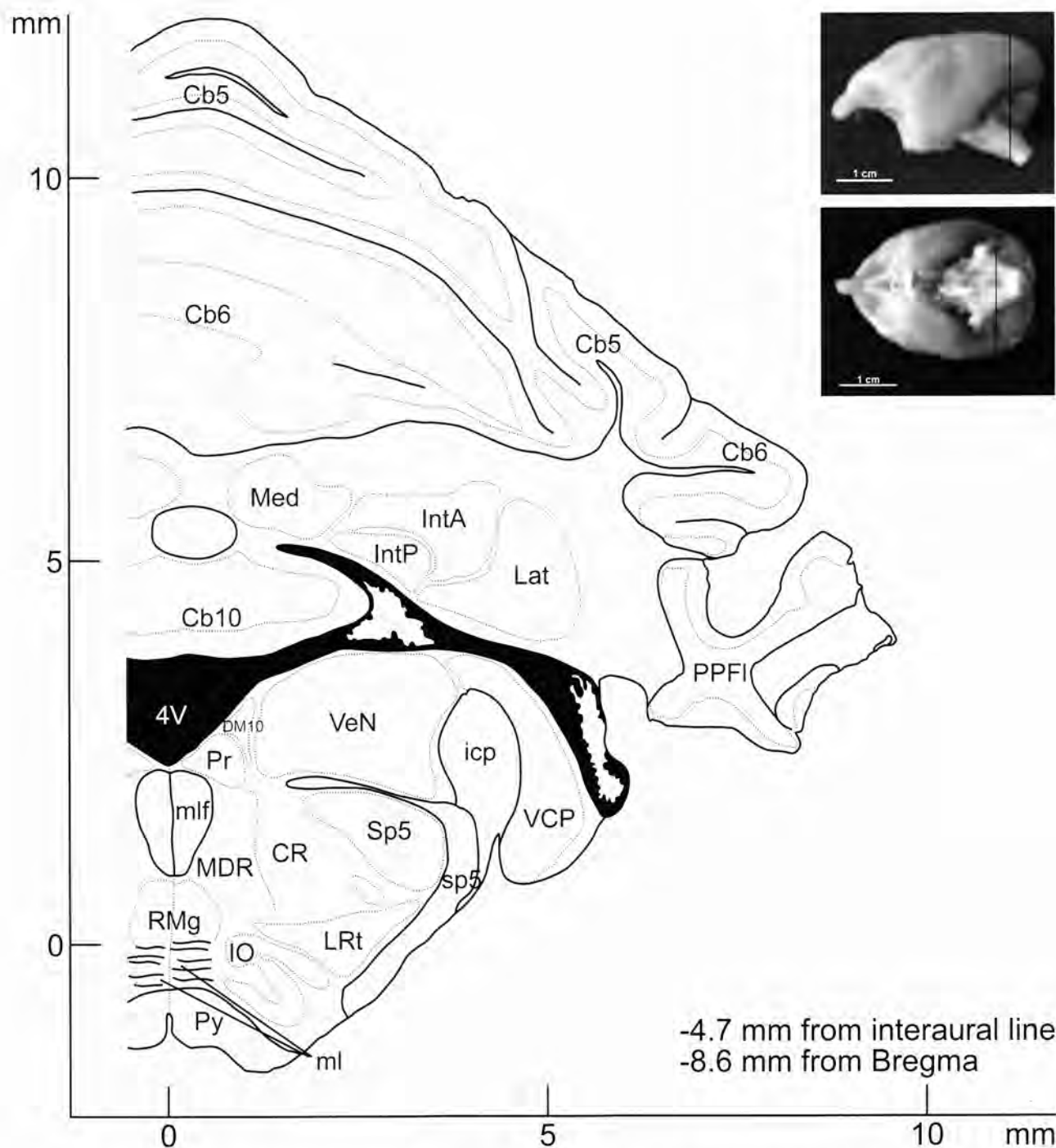
4V, 4th ventricle; 7n, facial nerve; 7N, facial nucleus; 8n, vestibulocochlear nerve; Cb4, cerebellar lobule 4; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; icp, inferior cerebellar peduncle (restiform body); Int, interposed cerebellar nucleus; IO, inferior olive; Lat, lateral (dentate) cerebellar nucleus; LVeN, lateral vestibular nucleus; mcp, middle cerebellar peduncle; MDR, medullary reticular nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MVeN, medial vestibular nucleus; PPFI, posterior paraflocculus; Pr, prepositus nucleus; py, pyramidal tract; RMg, nucleus raphe magnus; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; SVeN, superior vestibular nucleus; VCA, ventral cochlear nucleus, anterior part.





4V, 4th ventricle; 4VLR, lateral recess of the 4th ventricle; 7N, facial nucleus; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Gi, gigantocellular reticular nucleus; icp, inferior cerebellar peduncle (restiform body); IntA, interposed cerebellar nucleus, anterior part, IntP, interposed cerebellar nucleus, posterior part, IO, inferior olive; Irt, intermediate reticular nucleus; Lat, lateral (dentate) cerebellar nucleus; LVeN, lateral vestibular nucleus; Med, medial (fastigial) cerebellar nucleus; mlf, medial longitudinal fasciculus; MVeNMC, medial vestibular nucleus, magnocellular; MVeNPC, medial vestibular nucleus, parvocellular; PPFI, posterior paraflocculus; Pr, prepositus nucleus; py, pyramidal tract; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VCP, ventral cochlear nucleus, posterior part.



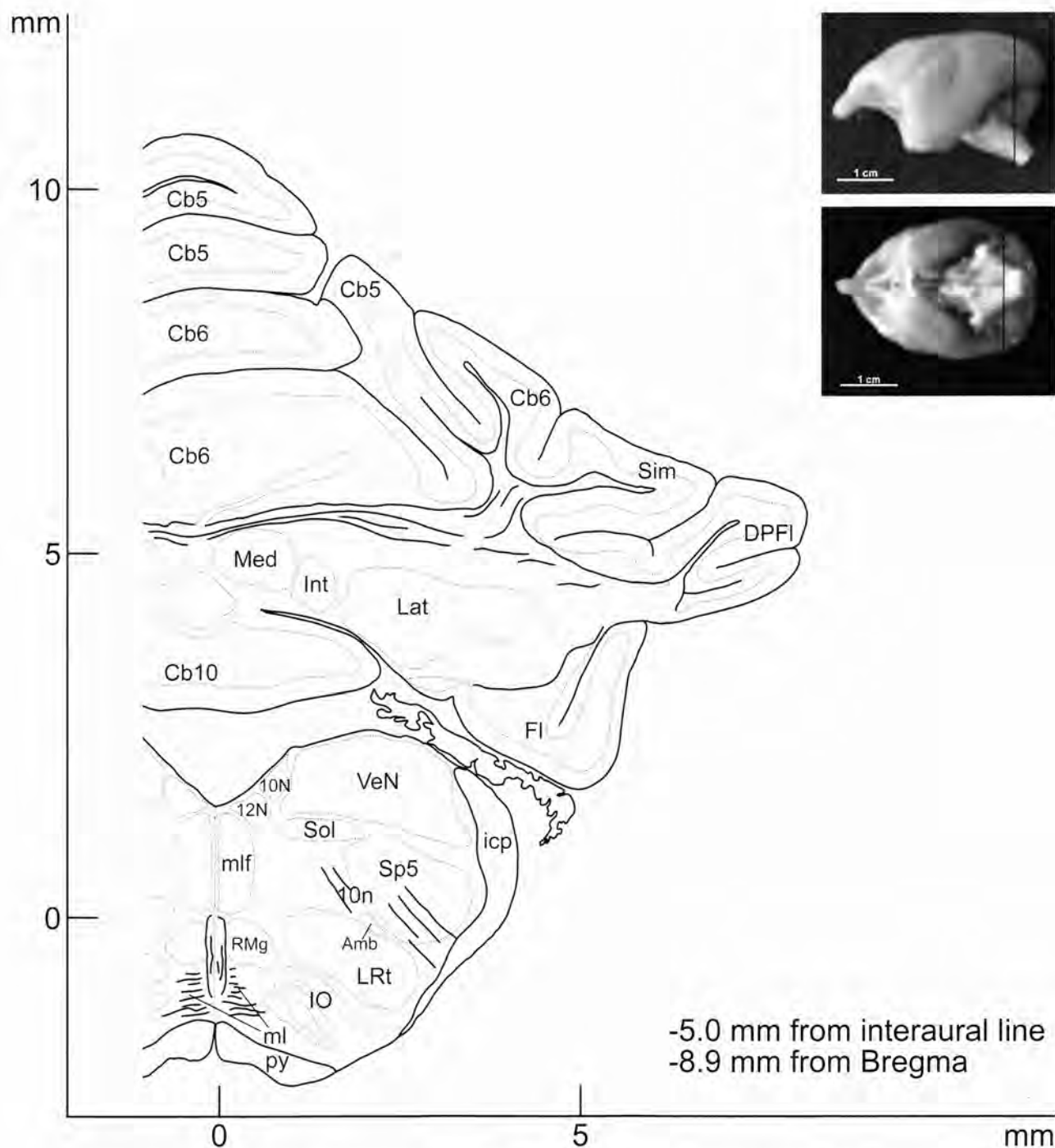


4V, 4th ventricle ; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Cb10, cerebellar lobule 10; CR, central reticular nucleus; DM10, nucleus dorsalis motorius nervi vagi; icp, inferior cerebellar peduncle (restiform body); IntA, interposed cerebellar nucleus, anterior part, IntP, interposed cerebellar nucleus, posterior part, IO, inferior olive; Lat, lateral (dentate) cerebellar nucleus; LRt, lateral reticular nucleus; MDR, medullary reticular nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; PPFI, posterior paraflocculus; Pr, prepositus nucleus; Py, pyramidal tract; RMg, nucleus raphe magnus; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VCP, ventral cochlear nucleus, posterior part; VeN, vestibular nuclei.

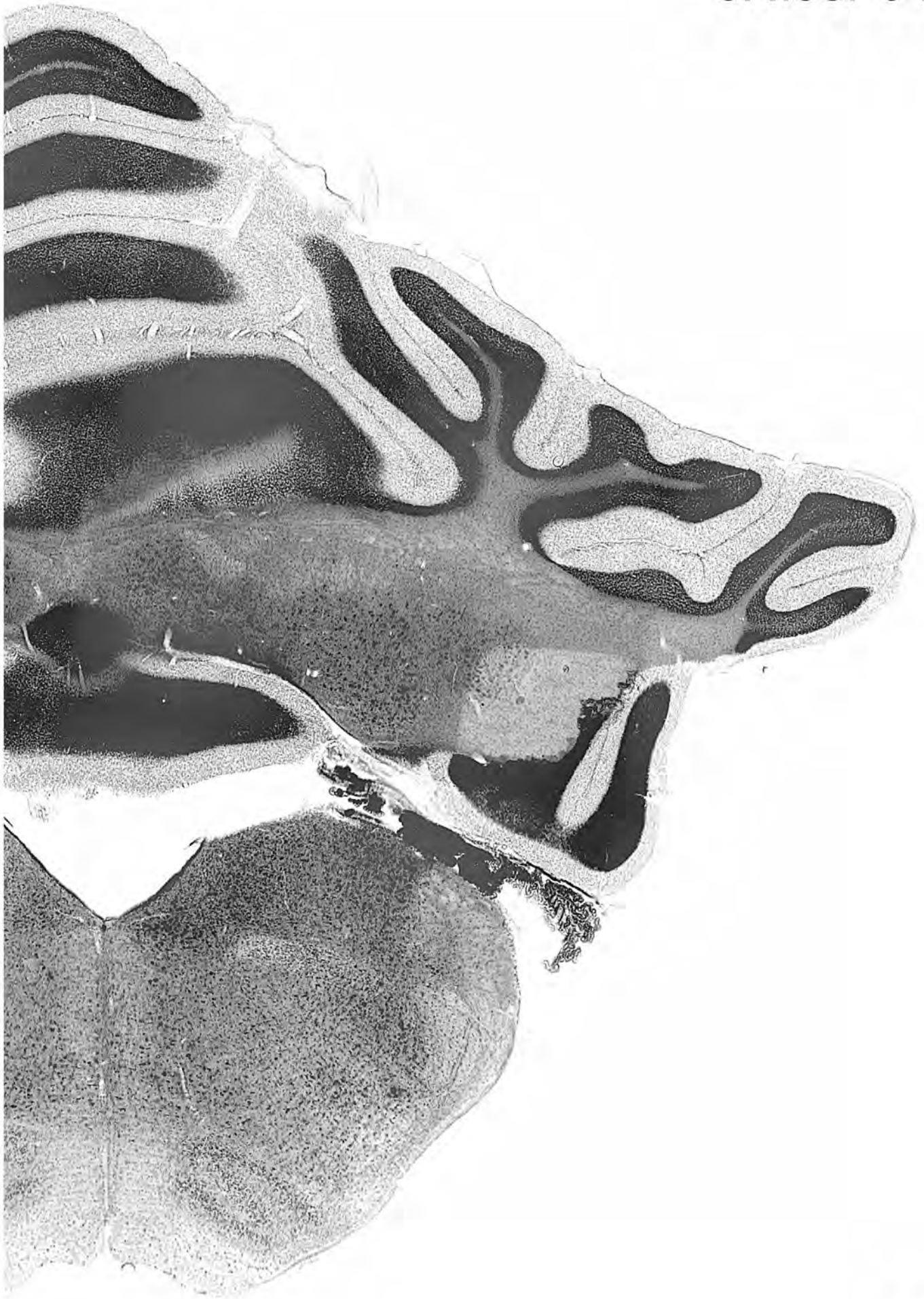
cNissl-60

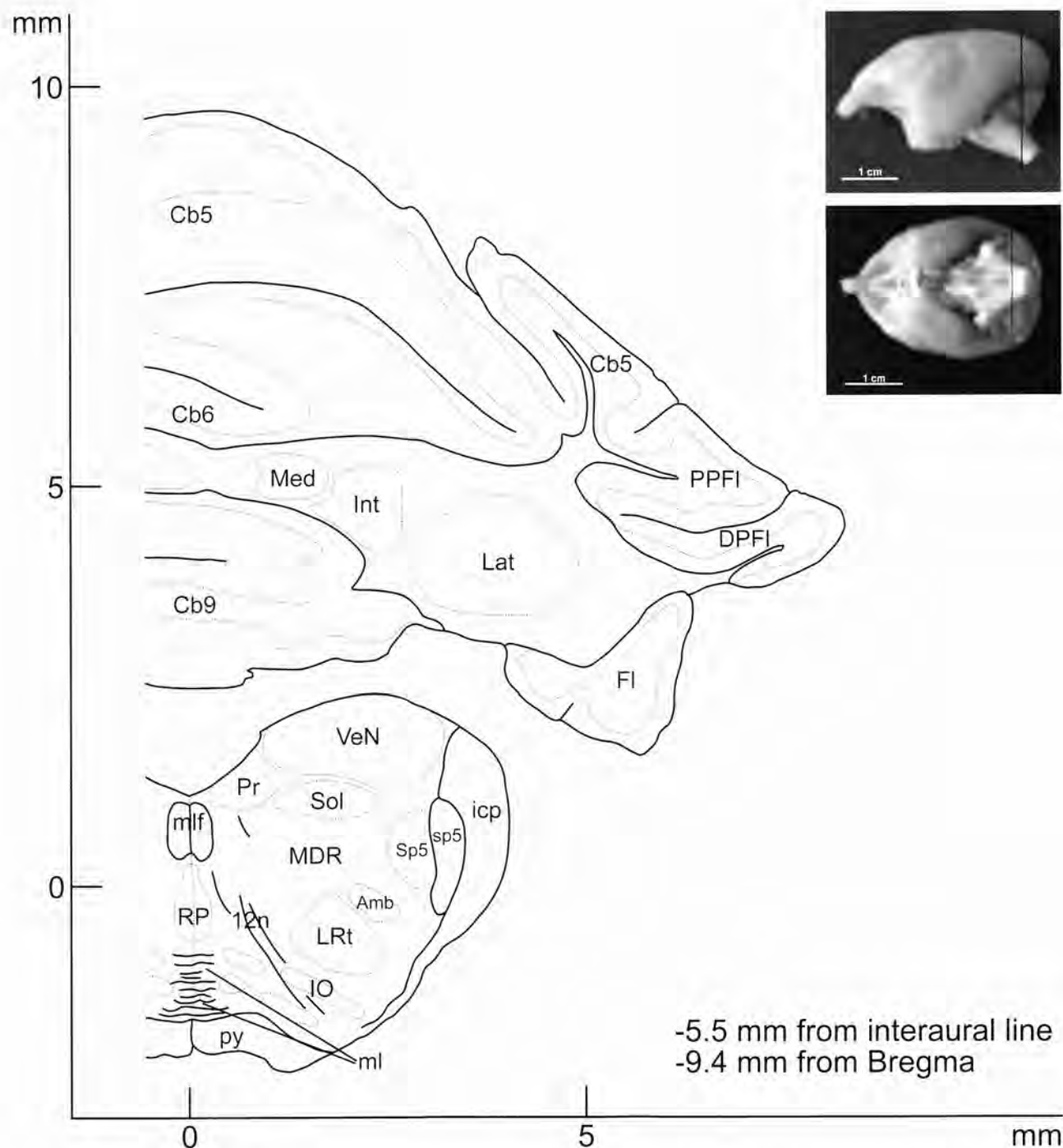


cTr-61

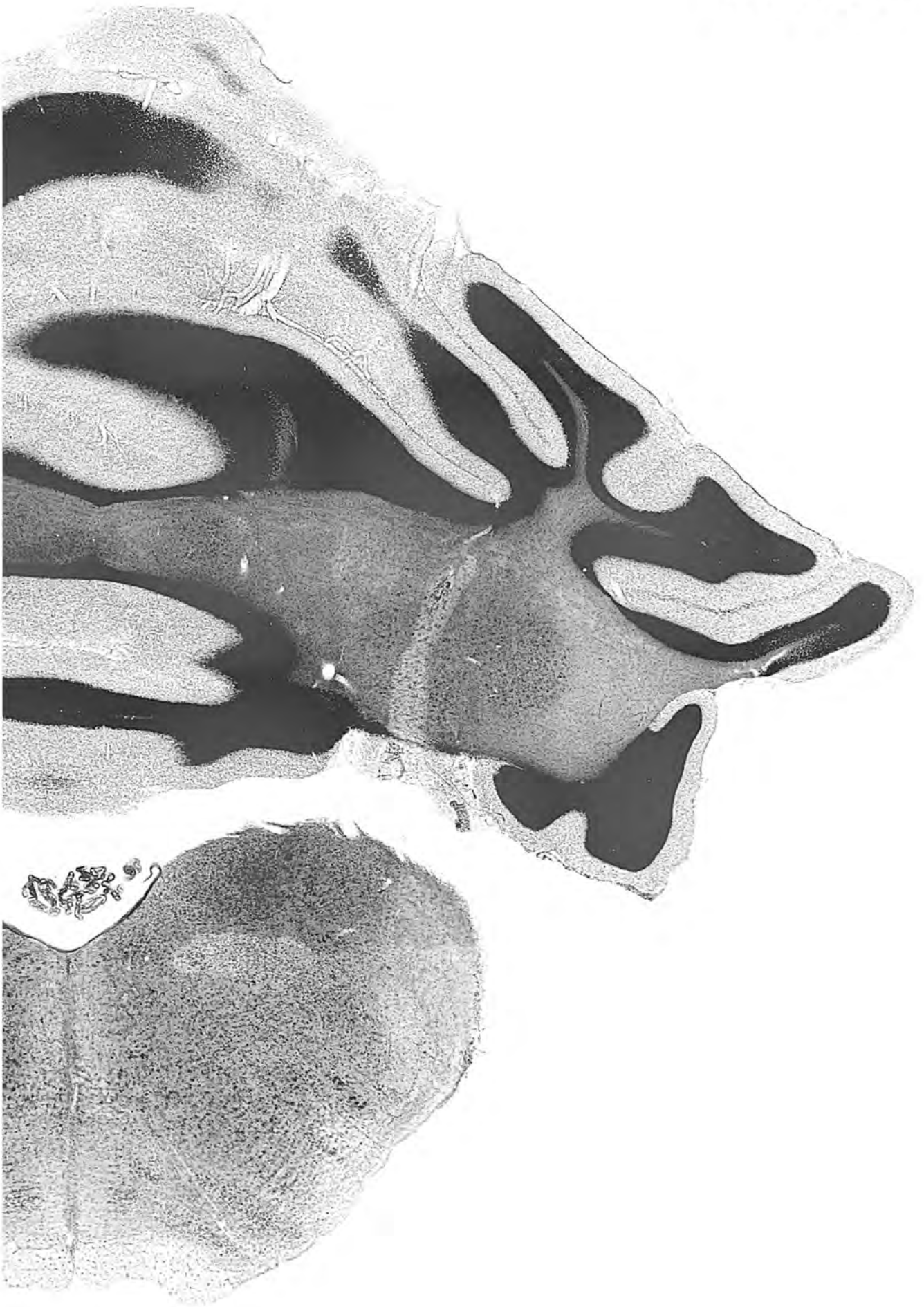


10N, dorsal motor nucleus of vagus nerve; 10n, vagus nerve; 12N, hypoglossal nucleus; Amb, ambiguus nucleus; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Cb10, cerebellar lobule 10; DPFI, dorsal paraflorculus; FI, florculus; icp, inferior cerebellar peduncle (restiform body); Int, interposed cerebellar nucleus; IO, inferior olive; Lat, lateral (dentate) cerebellar nucleus; LRt, lateral reticular nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; py, pyramidal tract; RMg, nucleus raphe magnus; Sim, simple lobule; Sol, solitary nucleus; Sp5, spinal trigeminal nucleus; VeN, vestibular nuclei.

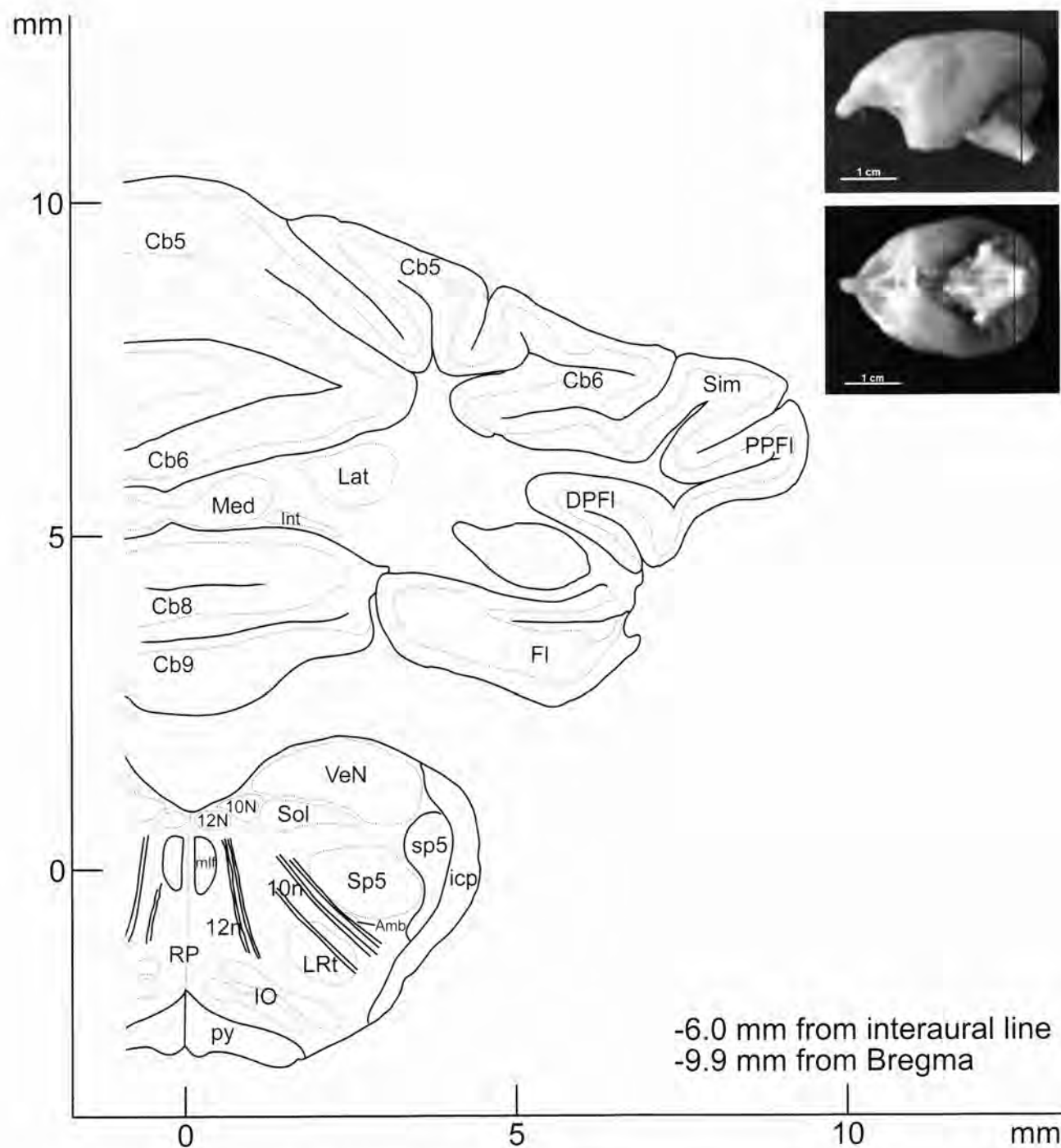




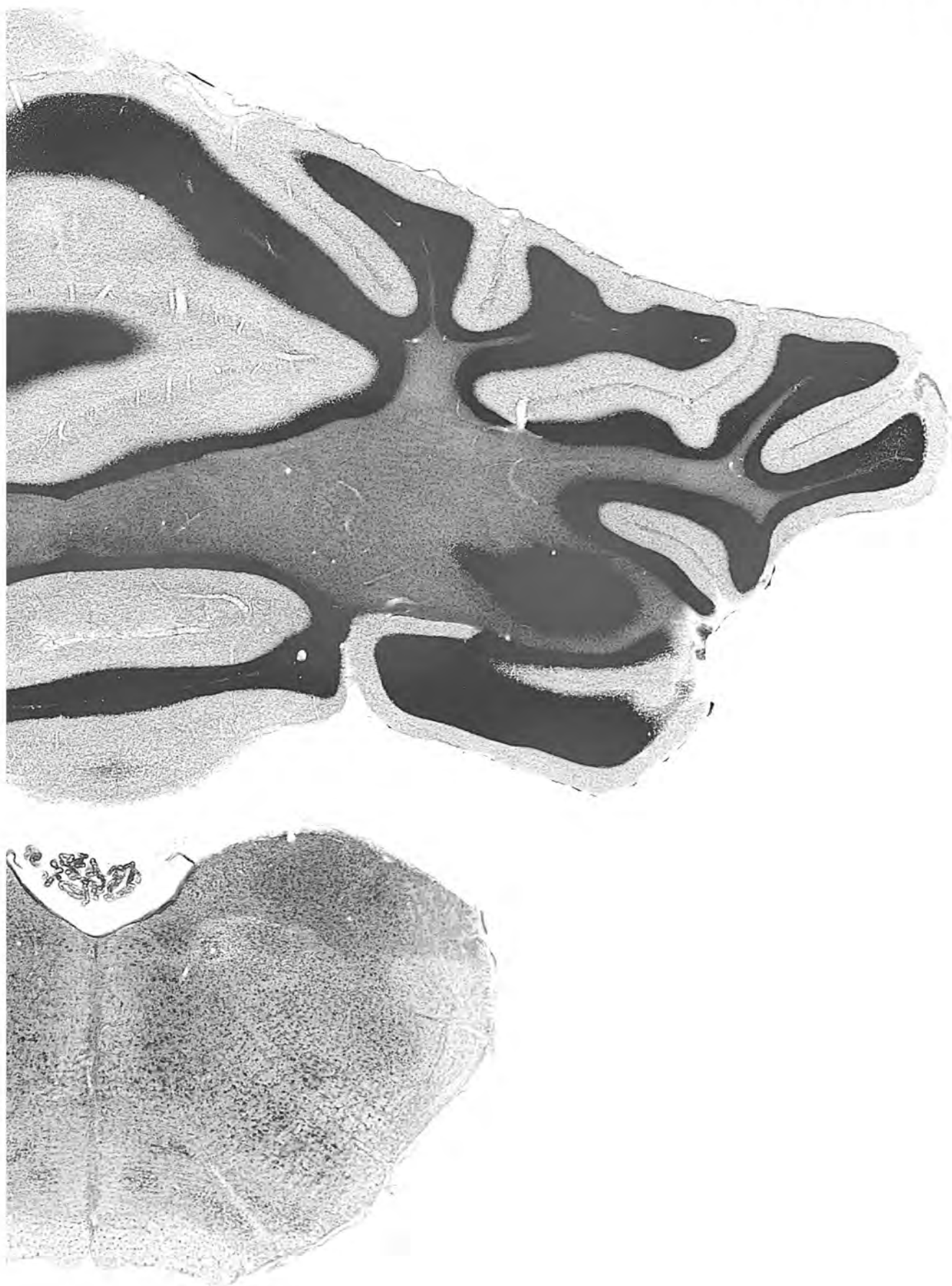
12n, root of hypoglossal nerve; Amb, ambiguus nucleus; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Cb9, cerebellar lobule 9; DPFI, dorsal parafocculus; FI, flocculus; icp, inferior cerebellar peduncle (restiform body); Int, interposed cerebellar nucleus; IO, inferior olive; Lat, lateral (dentate) cerebellar nucleus; LRt, lateral reticular nucleus; MDR, medullary reticular nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; PPFI, posterior parafocculus; Pr, prepositus nucleus; py, pyramidal tract; RP, nucleus raphe pallidus; Sol, solitary nucleus; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VeN, vestibular nuclei.



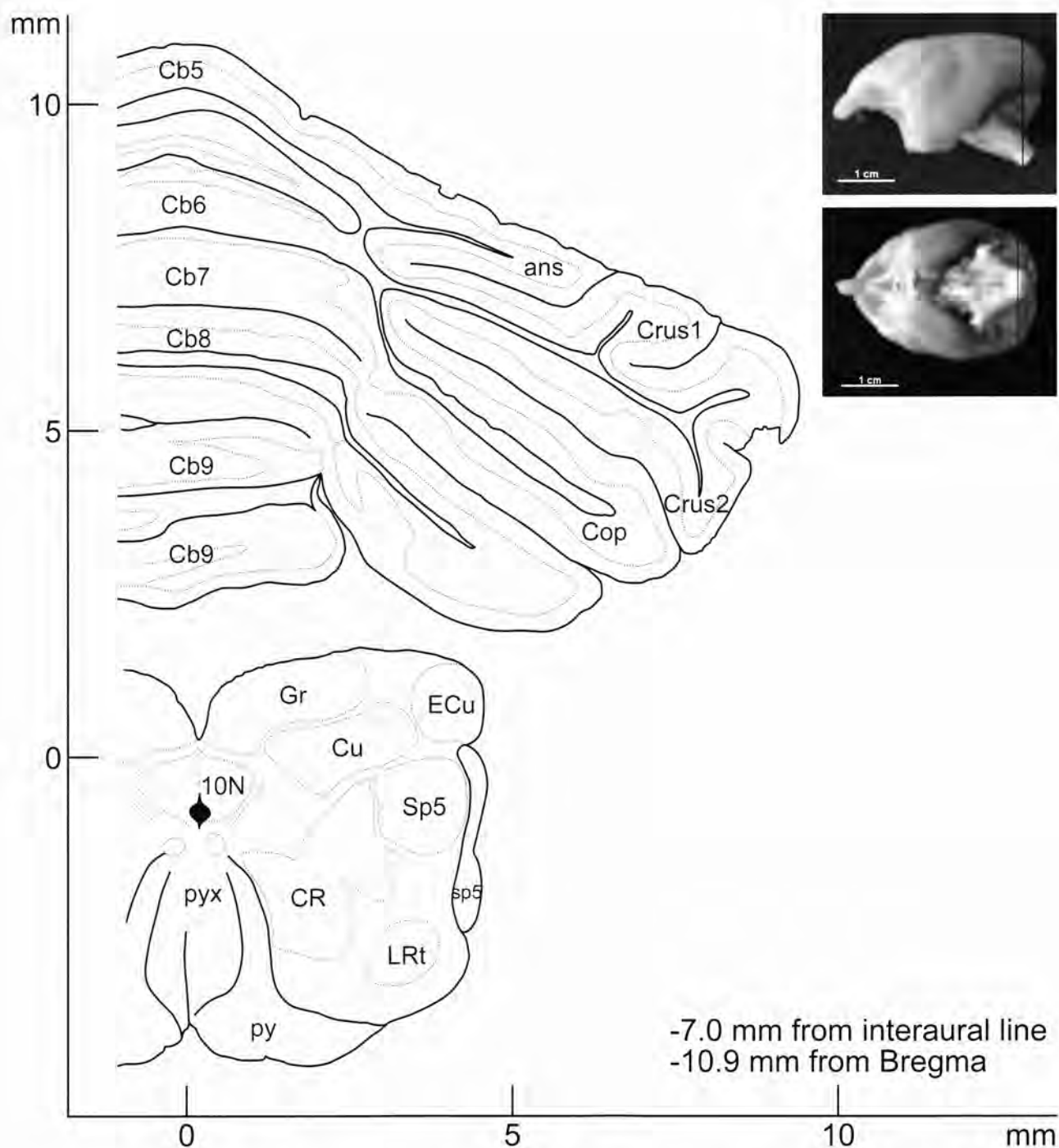
cTr-63



10N, dorsal motor nucleus of vagus nerve; 10n, vagus nerve; 12N, hypoglossal nucleus; 12n, root of hypoglossal nerve; Amb, ambiguous nucleus; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Cb8, cerebellar lobule 8; Cb9, cerebellar lobule 9; DPFI, dorsal parafofoculus; FI, flocculus; icp, inferior cerebellar peduncle (restiform body); Int, interposed cerebellar nucleus; IO, inferior olive; Lat, lateral (dentate) cerebellar nucleus; LRT, lateral reticular nucleus; Med, medial (fastigial) cerebellar nucleus; mlf, medial longitudinal fasciculus; PPFI, posterior parafofoculus; py, pyramidal tract; RP, nucleus raphe pallidus; Sim, simple lobule; Sol, solitary nucleus; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract; VeN, vestibular nuclei.

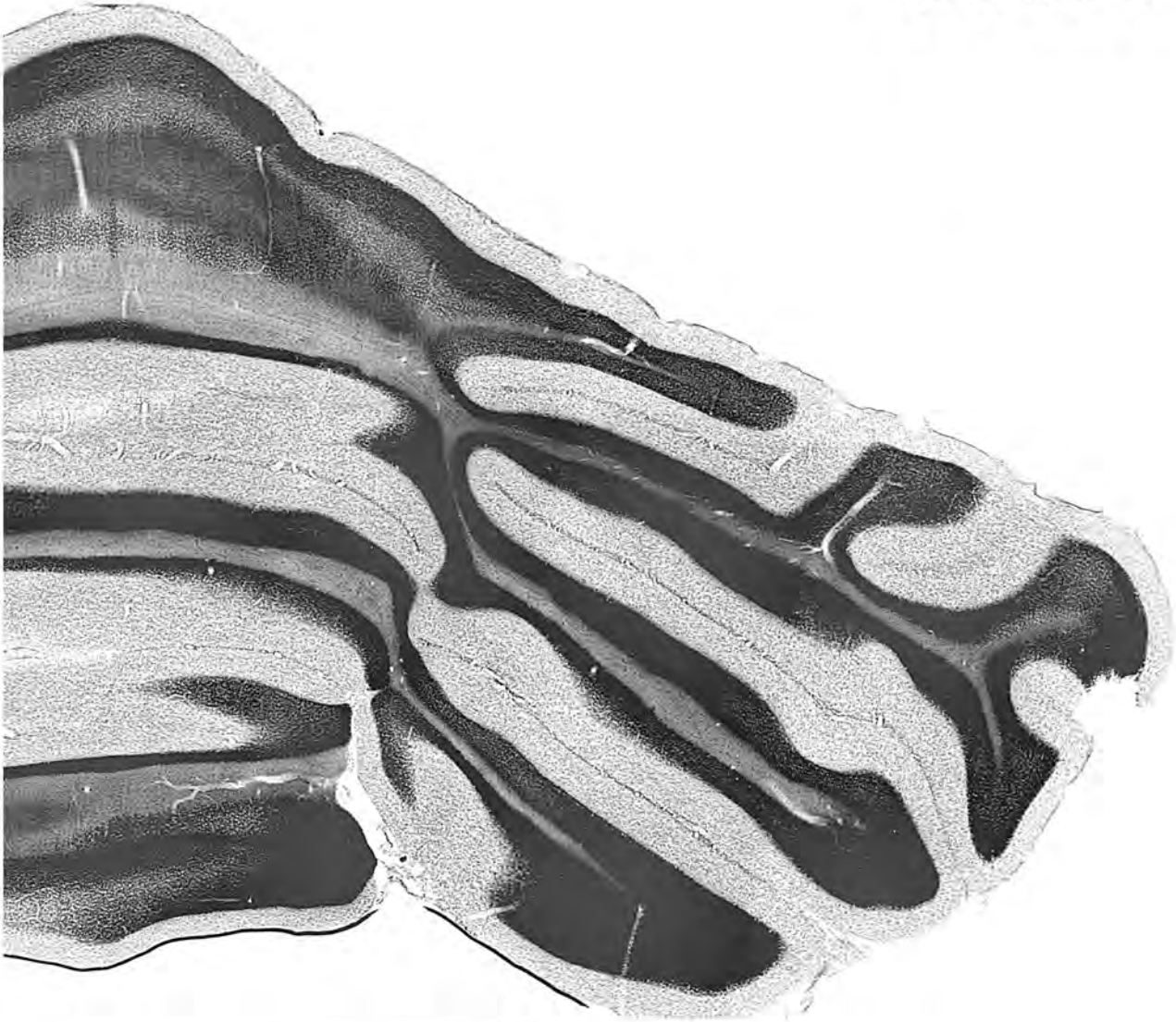


cTr-64

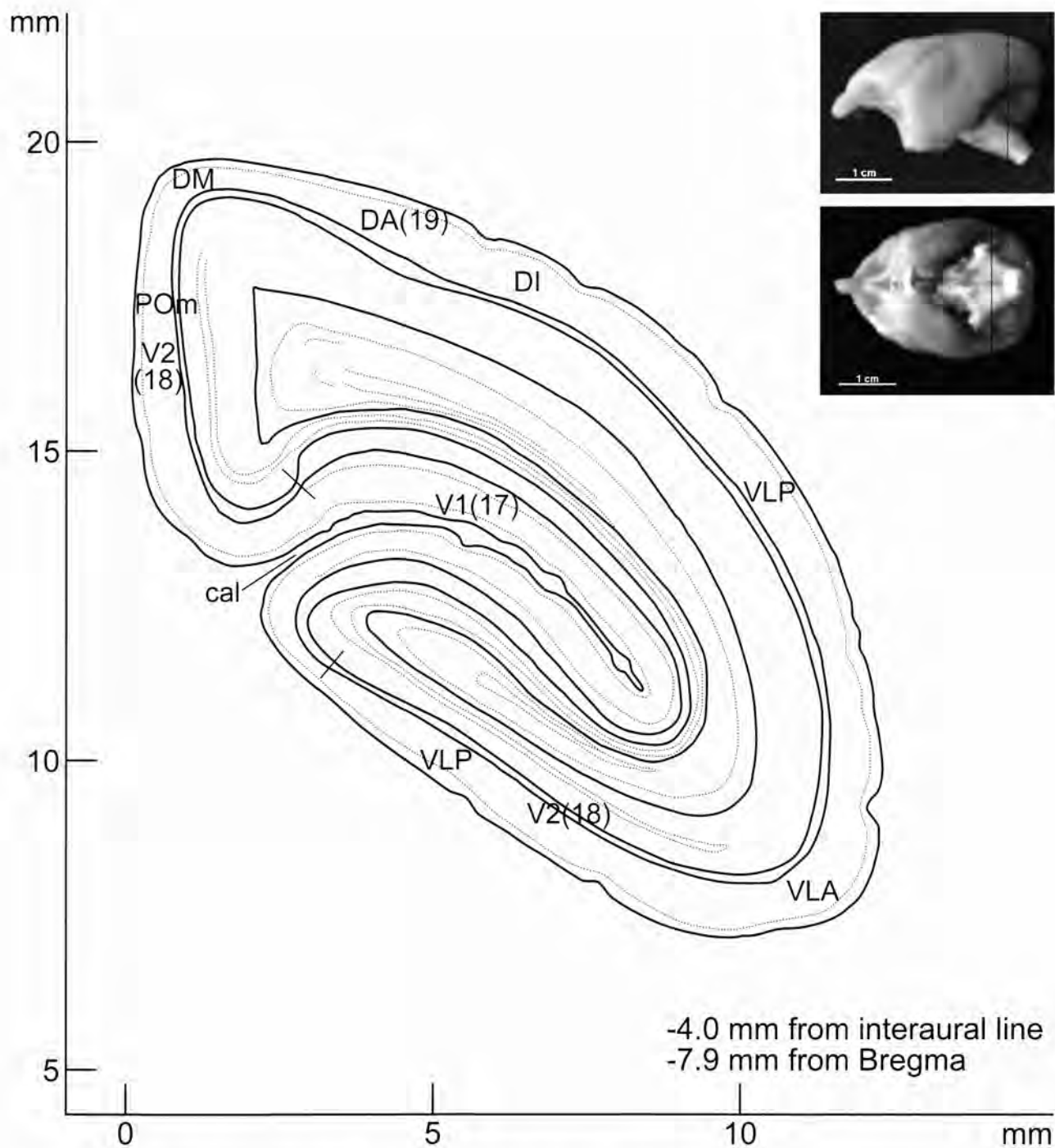


10N, dorsal motor nucleus of vagus nerve; ans, ansiform lobule of the cerebellum; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; Cb7, cerebellar lobule 7; Cb8, cerebellar lobule 8; Cb9, cerebellar lobule 9; Cop, copula of the pyramis; CR, central reticular nucleus; Crus1, crus 1 of the ansiform lobule; Crus2, crus 2 of the ansiform lobule; Cu, cuneate nucleus; ECu, external cuneate nucleus; Gr, gracile nucleus; LRt, lateral reticular nucleus; py, pyramidal tract; pyx, pyramidal decussation; Sp5, spinal trigeminal nucleus; sp5, spinal trigeminal tract.

cNissl-64

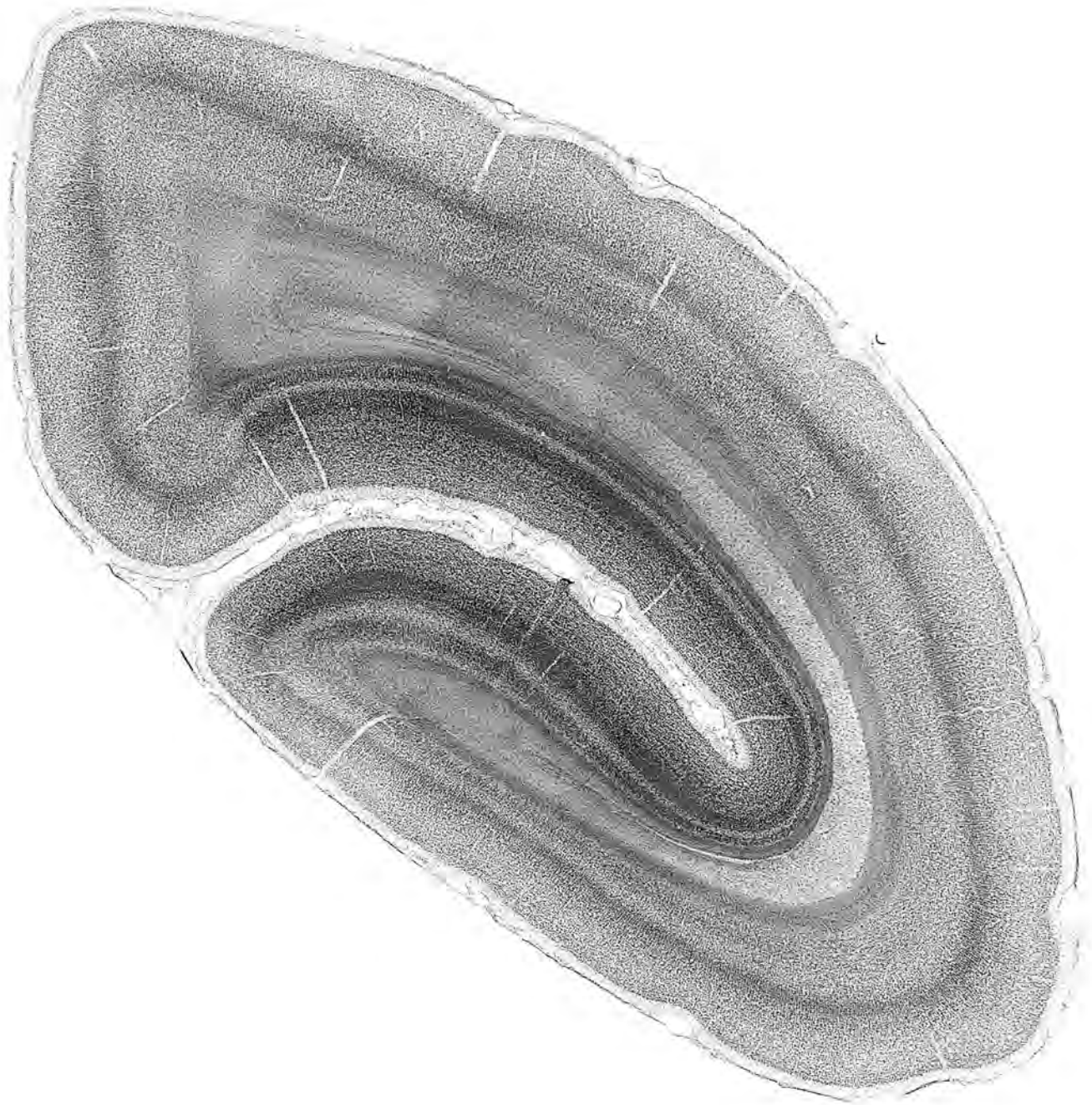


cTr-65

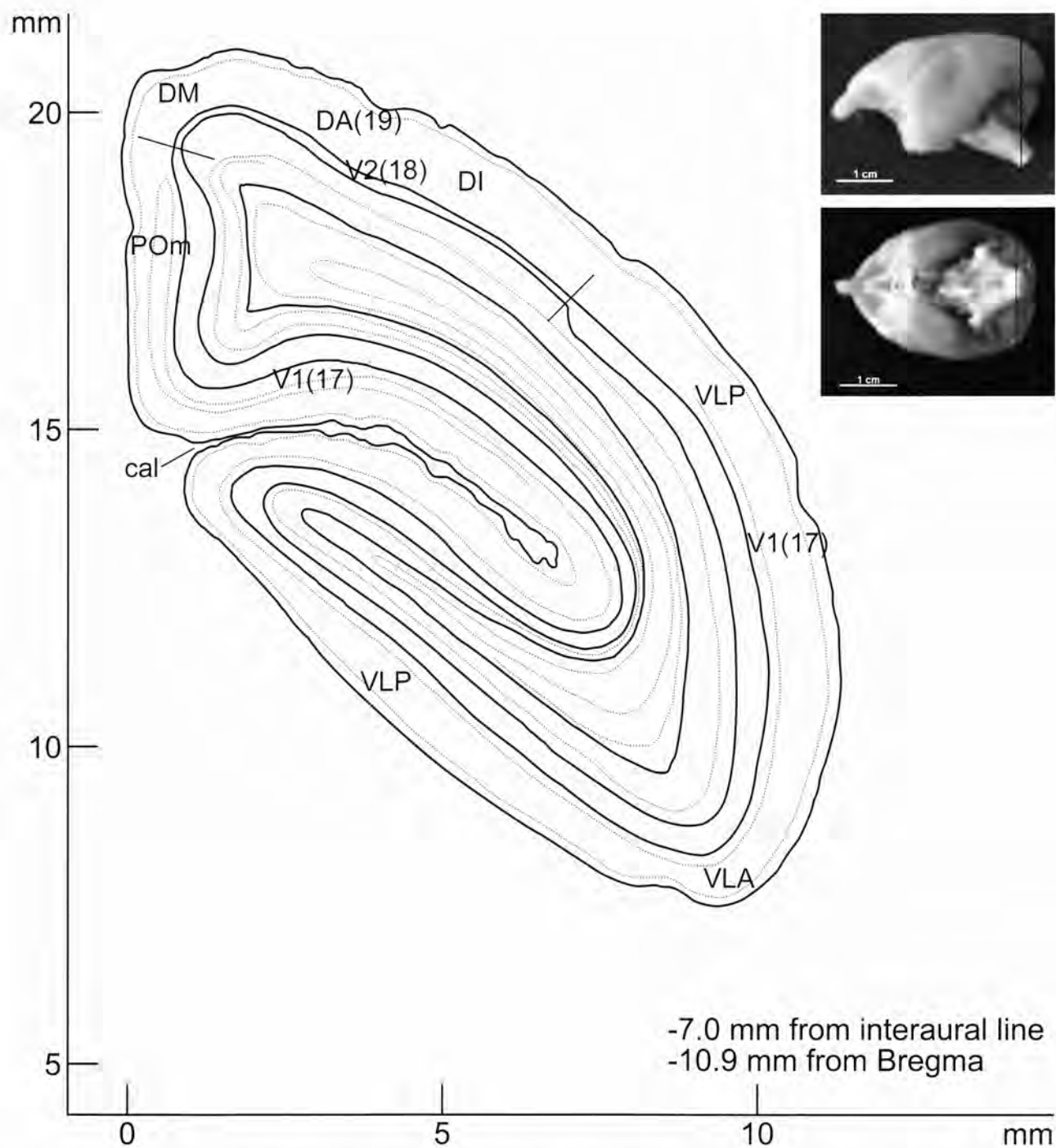


17, 18, 19, Brodmann's parcellation of the cortex; cal, calcarine sulcus; DA, dorsoanterior extrastriate area; DI, dorsointermediate visual area; DM, dorsomedial visual area; POrn, parietooccipital medial area; V1, primary visual cortex; V2, second visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area.

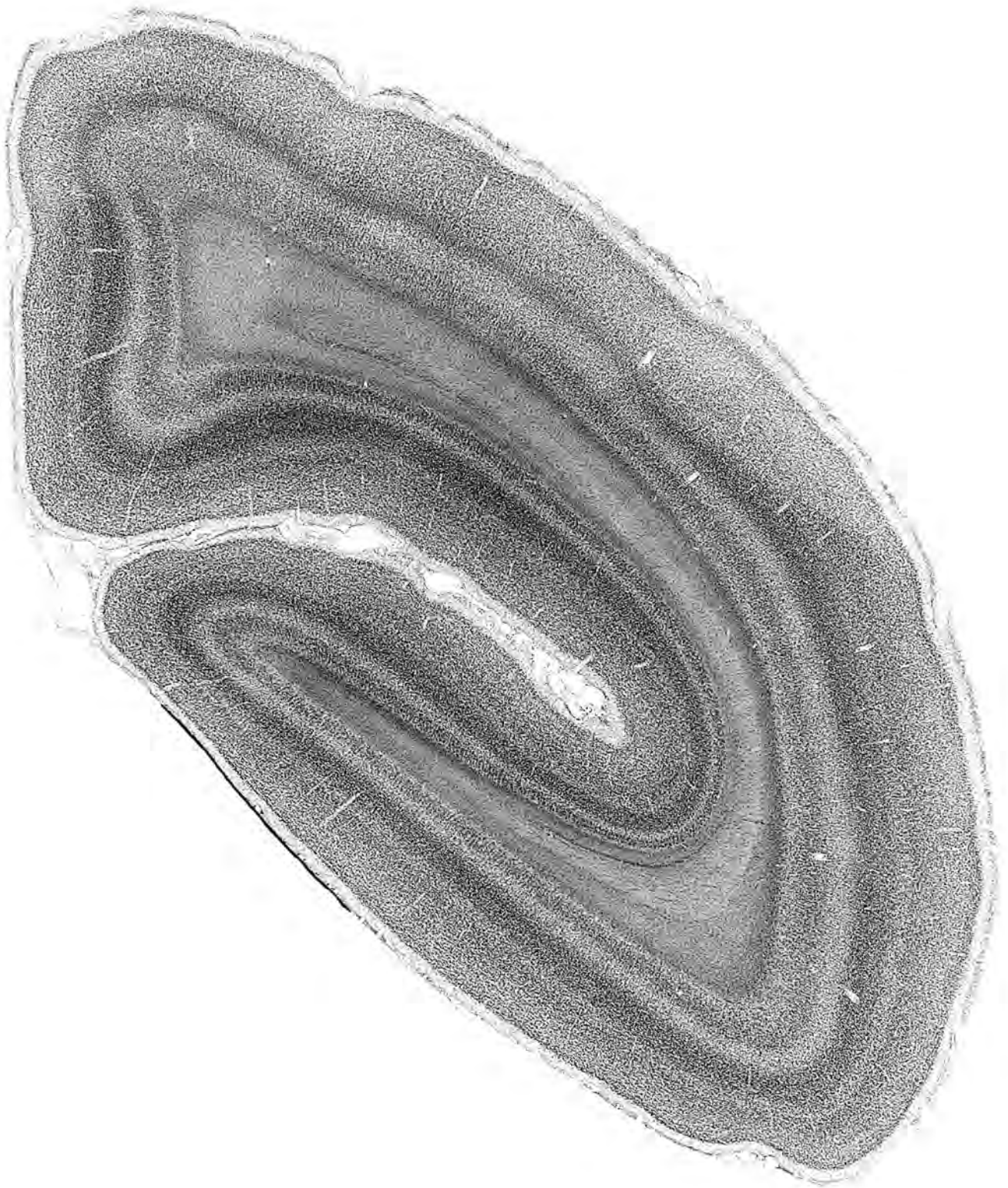
cNissl-65

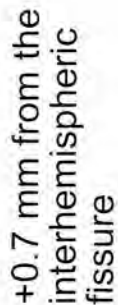


cTr-66



17, 18, 19, Brodmann's parcellation of the cortex; cal, calcarine sulcus; DA, dorsoanterior extrastriate area; DI, dorsointermediate visual area; DM, dorsomedial visual area; POM, parietooccipital medial area; V1, primary visual cortex; V2, second visual area; VLA, ventrolateral anterior extrastriate area; VLP, ventrolateral posterior extrastriate area.

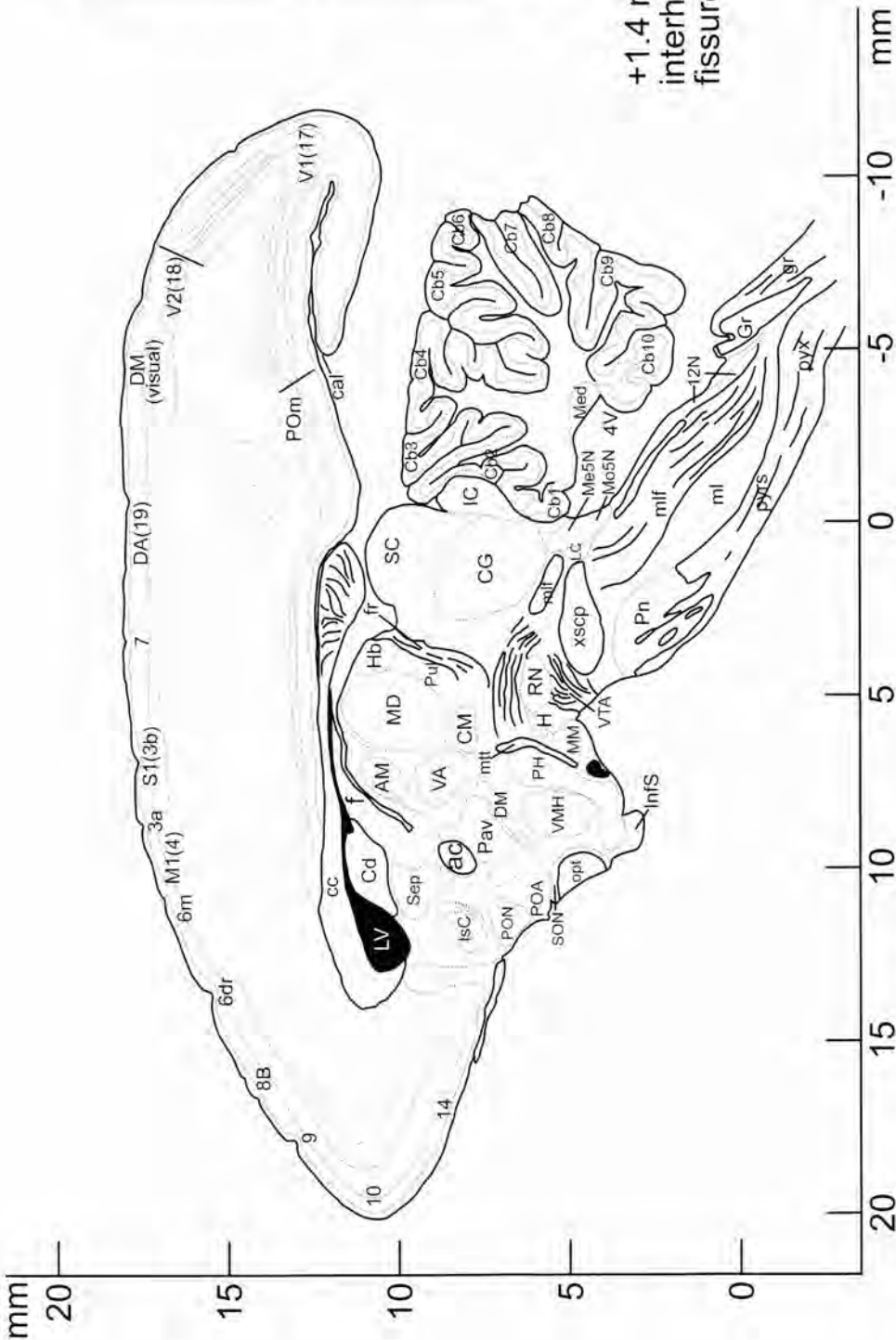




3a, 3b, 4, 6dr, 6m, 7, 8B, 9, 10, 14, 17, 18, 19, 25, Brodmann's parcellation of the cortex; 3N, oculomotor nucleus; 3V, 3rd ventricle; 4N, trochlear nucleus; 12N, hypoglossal nucleus; ac, anterior commissure; AM, anteromedial thalamic nucleus; BST, bed nucleus of the stria terminalis; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; CG, central gray; DA, dorsoanterior extrastriate area; dlf, dorsal longitudinal fasciculus; DM, dorsomedial hypothalamic nucleus; DM (visual area), dorsomedial area; f, fornix; Gr, gracile nucleus; Hb, habenular nucleus; IC, inferior colliculus; InfS, infundibular stem; LSD, lateral septal nucleus, dorsal part; M1, primary motor area; MD, mediodorsal thalamic nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MM, medial mammillary nucleus, medial part; mtt, mamillothalamic tract; opt, optic tract; PH, posterior hypothalamic area; Pn, pontine nuclei; POA, preoptic area; POM, parietooccipital medial area; Pul, pulvinar nuclei; py, pyramidal tract; pyrs, pyramis; RN, red nucleus; S1, primary somatosensory area; SC, superior colliculus; SON, supraoptic nucleus; V1, primary visual cortex; V2, second visual area; VMH, ventromedial hypothalamic nucleus; VTA, ventral tegmental area; xml, decussation of the superior cerebellar peduncle; ZI, zona incerta.



psTr-02

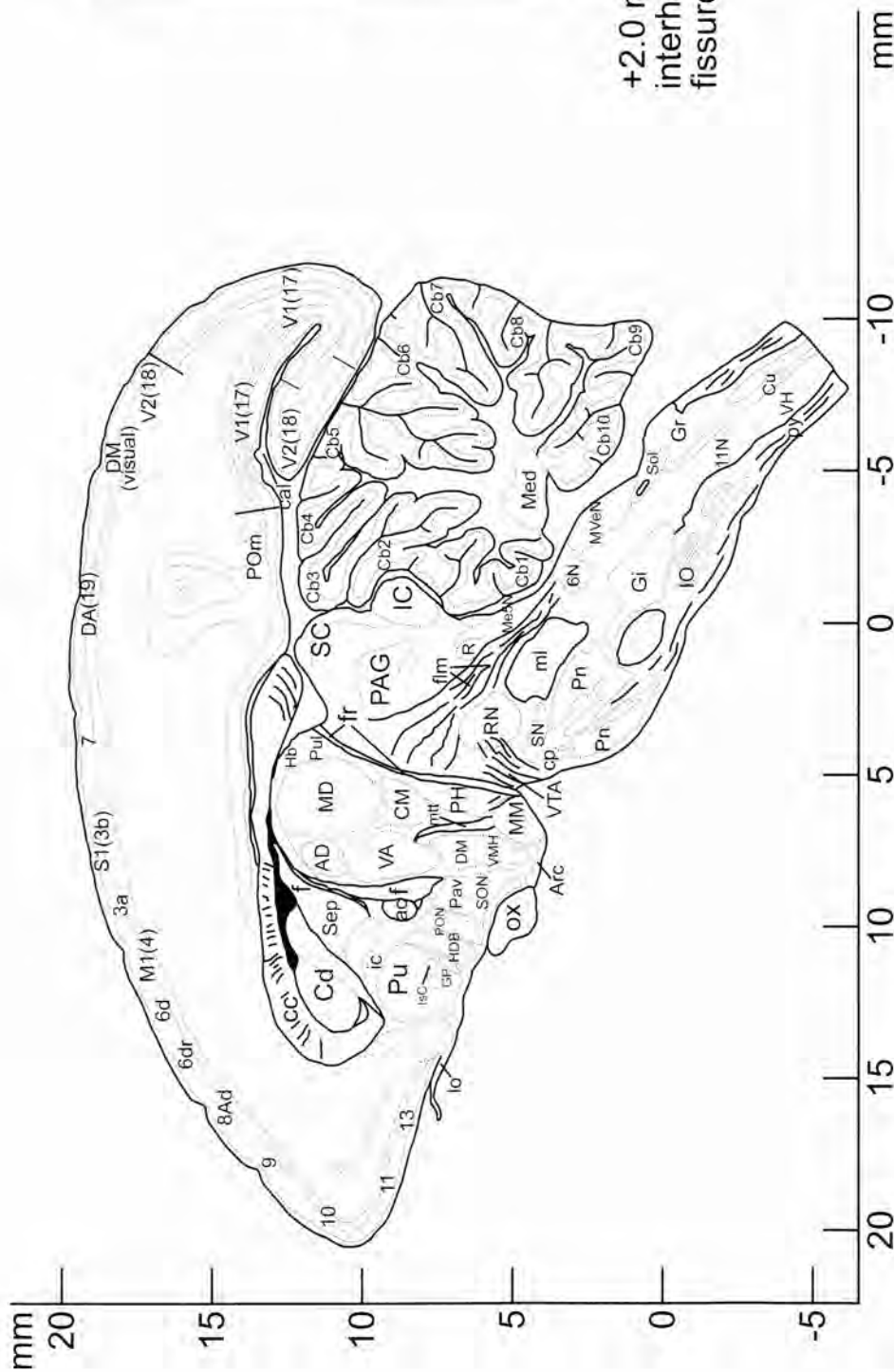


+1.4 mm from the
interhemispheric
fissure

3a, 3b, 4, 6dr, 6m, 7, 8B, 9, 10, 14, 17, 18, 19, Brodmann's parcellation of the cortex: 4V, 4th ventricle; 12N, hypoglossal nucleus; ac, anterior commissure; AM, antero-medial thalamic nucleus; cal, calcarine sulcus; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; Cd, caudate nucleus; CG, central gray; CM, central medial thalamic nucleus; DA, dorsoanterior extrastriate area; DM, dorsomedial hypothalamic nucleus; DM (visual area), dorsomedial area; f, fornix; fr, fasciculus retroflexus; Gr, gracile nucleus; gr, gracile fasciculus; H, campus Foreli; Hb, habenular nucleus; IC, inferior colliculus; InfS, infundibular stem; IsC, Island of Calleja; LC, locus coeruleus; LV, lateral ventricle; M1, primary motor area; MD, mediodorsal thalamic nucleus; Me5N, mesencephalic trigeminal nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MM, medial mammillary nucleus, medial part; Mo5N, motor nucleus of trigeminal nerve; mlt, mamillothalamic tract; opt, optic tract; Pav, paraventricular hypothalamic nucleus; PH, posterior hypothalamic area; Pn, pontine nuclei; POA, preoptic area; POm, parietooccipital medial area; PON, preoptic nucleus; Pul, pulvinar nuclei; pyrs, pyramis; pyx, pyramidal decussation; RN, red nucleus; S1, primary somatosensory area; SC, superior colliculus; Sep, Septum; SON, supraoptic nucleus; V1, primary visual cortex; V2, second visual area; VA, ventral anterior thalamic nucleus; VMH, ventromedial hypothalamic nucleus; VTA, ventral tegmental area; xscp, decussation of the superior cerebellar peduncle.



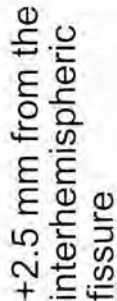
psTr-03



3a, 3b, 4, 6d, 7, 8Ad, 9, 10, 11, 13, 17, 18, 19, Brodmann's parcellation of the cortex; 6N, abducens nucleus; 11N, accessory nucleus; ac, anterior commissure; AD, anterodorsal nucleus; Arc, arcuate hypothalamic nucleus; cal, calcarine sulcus; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; Cd, caudate nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; Cu, cuneate nucleus; DA, dorsoanterior extrastriate area; DM, dorsomedial hypothalamic nucleus; DM (visual area), dorsomedial area; f, fornix; flm, fasciculus longitudinalis medialis; fr, fasciculus retroflexus; Gi, gigantocellular reticular nucleus; GP, globus pallidus; Gr, gracile nucleus; Hb, habenular nucleus; HDB, nucleus of the horizontal limb of the diagonal band; IC, inferior colliculus; ic, internal capsule; IO, inferior olive; IsC, island of Calleja; lo, lateral olfactory tract; M1, primary motor area; MD, mediodorsal thalamic nucleus; Me5N, mesencephalic trigeminal nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; MM, medial mammillary nucleus, medial part; mlt, mamillothalamic tract; MVeN, medial vestibular nucleus; ox, optic chiasm; PAG, periaqueductal gray; Pav, paraventricular hypothalamic nucleus; PH, posterior hypothalamic area; Pn, pontine nuclei; POm, parietooccipital medial area; PON, preoptic nucleus; Pu, putamen; Pul, pulvinar nuclei; py, pyramidal tract; R, raphe nucleus; RN, red nucleus; S1, primary somatosensory area; SC, superior colliculus; Sep, Septum; SN, substantia nigra; Sol, solitary nucleus; SON, supraoptic nucleus; V1, primary visual cortex; V2, Second visual area; VA, ventral anterior thalamic nucleus; VH, ventral horn; VMH, ventromedial hypothalamic nucleus; VTA, ventral tegmental area.

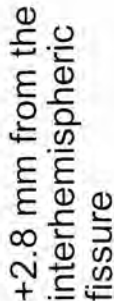
psNissl-03





3A, 3b, 4, 6, 7, 8Ad, 9, 10, 11, 13, 17, 18, 19, 46, Brodmann's parcellation of the cortex; 3n, oculomotor nerve or its root; 6N, abducens nucleus; ac, anterior commissure; AD, anterodorsal nucleus; BST, bed nucleus of the stria terminalis; cal, calcarine sulcus; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; Cd, caudate nucleus; CM, central medial thalamic nucleus; DA, dorsoanterior extrastriate area; DM (visual area), dorsomedial area; EGP, external globus pallidus; f, fornix; Gr, gracile nucleus; gr, gracile fasciculus; H, campus Foreli; IC, inferior colliculus; IGP, internal globus pallidus; IO, inferior olive; LC, locus coeruleus; LD, lateral dorsal thalamic nucleus; M1, primary motor area; MD, mediodorsal thalamic nucleus; Me5N, mesencephalic trigeminal nucleus; Med, medial (fastigial) cerebellar nucleus; ML, medial mamillary nucleus; mlf, medial lemniscus; mlt, medial longitudinal fasciculus; Mo5N, motor nucleus of trigeminal nerve; mnt, mamillothalamic tract; MVeN, medial vestibular nucleus; ox, optic chiasm; PAG, periaqueductal gray; Pav, paraventricular hypothalamic nucleus; Pn, pontine nuclei; POA, preoptic area; POM, parietooccipital area; Pp, peripeduncular nucleus; Pu, putamen; Pul, pulvinar nuclei; py, pyramidal tract; RN, red nucleus; S1, primary somatosensory area; SC, superior colliculus; scp, superior cerebellar peduncle (brachium conjunctivum); SN, substantia nigra; Sol, solitary nucleus; SON, supraoptic nucleus; st, stria terminalis; V1, primary visual cortex; V2, second visual area; VA, ventral anterior thalamic nucleus; VLM, ventral lateral thalamic nucleus, medial part; VMH, ventromedial hypothalamic nucleus; VPM, ventral posteromedial thalamic nucleus; VTA, ventral tegmental area.

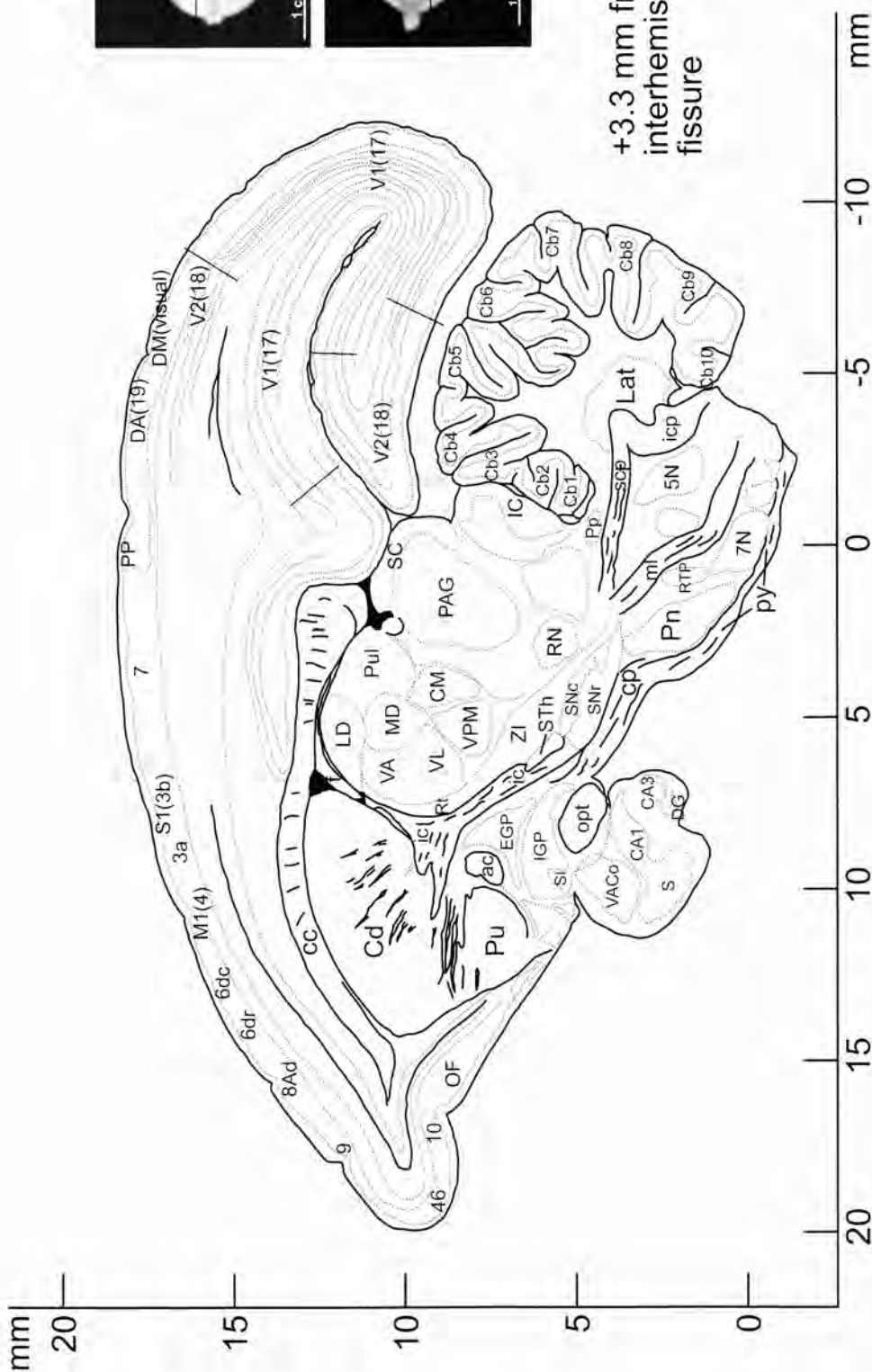




33a; 3b; 4, 6, 7; 8Ad; 9; 10; 17; 18; 19, 46; Brodmann's parcellation of the cortex; ac, anterior commissure; AD, anterodorsal nucleus; cal, calcarine sulcus; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; Cd, caudate nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; Cu, cuneate nucleus; DA, dorsoanterior extrastriate area; DM (visual area), dorsomedial area; f, fornix; GP, globus pallidus; Gr, gracile nucleus; IC, inferior colliculus; ic, internal capsule; IO, inferior olive; LD, lateral dorsal thalamic nucleus; M1, primary motor area; MD, mediodorsal thalamic nucleus; Med, medial (fastigial) cerebellar nucleus; ml, medial lemniscus; mlf, medial longitudinal fasciculus; MVeN, medial vestibular nucleus; ox, optic chiasm; PAG, periaqueductal gray; Pav, paraventricular hypothalamic nucleus; Pn, pontine nuclei; PP, posterior parietal cortex; Pu, putamen; Pul, pulvinar nuclei; py, pyramidal tract; RN, red nucleus; Rt, reticular thalamic nucleus; S1, primary somatosensory area; SC, superior colliculus; scp, superior cerebellar peduncle (brachium conjunctivum); SI, substantia innominata; SNC, substantia nigra, compact; SNr, substantia nigra, reticular part; SON, supraoptic nucleus; V1, primary visual cortex; V2, second visual area; VA, ventral anterior thalamic nucleus; VH, ventral horn; VL, ventral lateral thalamic nucleus; VLM, ventral lateral thalamic nucleus, medial part; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.

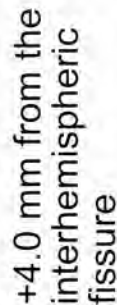


psTr-06

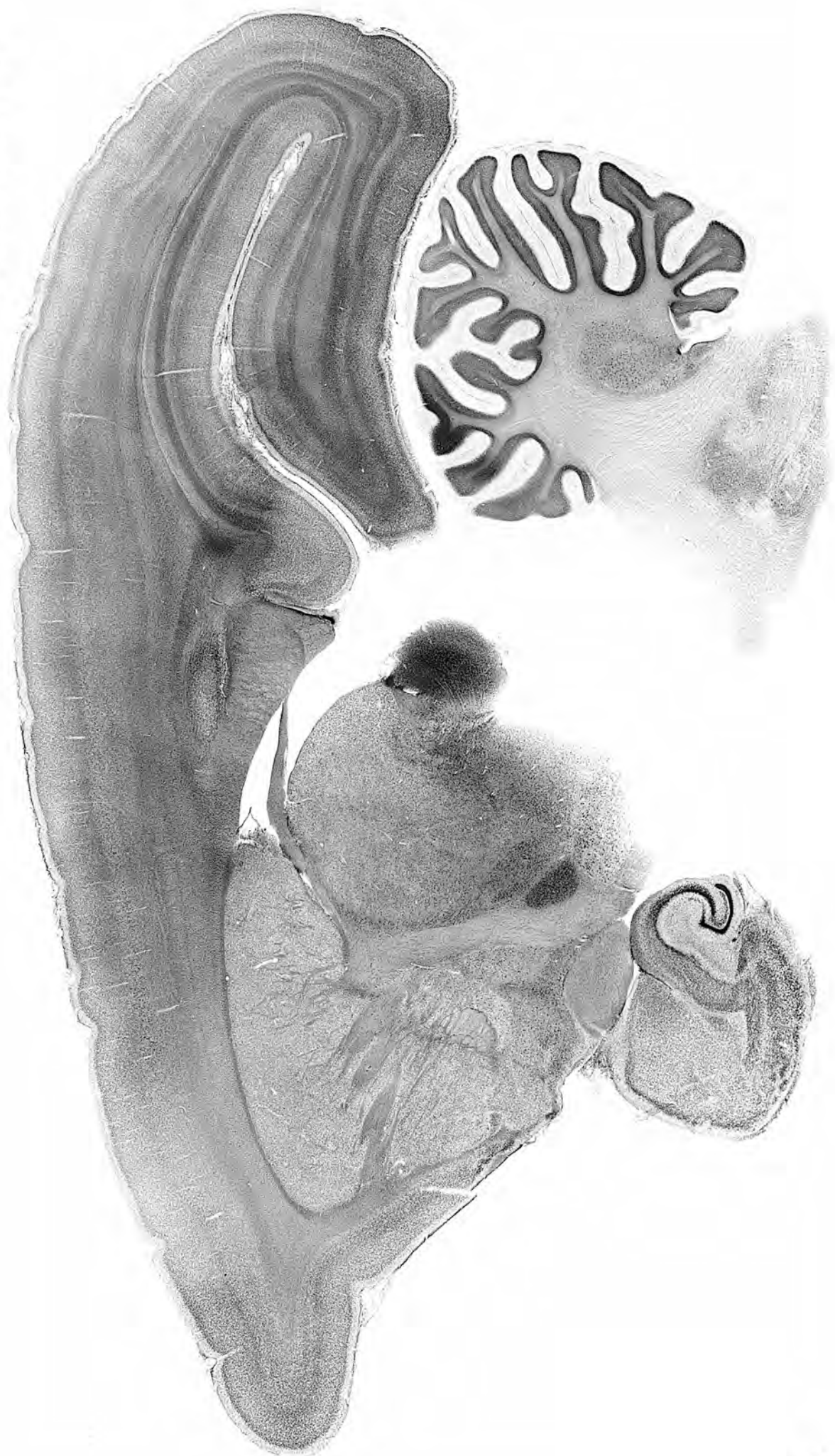


3a, 3b, 4, 6dc, 6dr, 8Ad, 9, 10, 17, 18, 19, 46, Brodmann's parcellation of the cortex; 5N, trigeminal nucleus; 7N, facial nucleus; ac, anterior commissure; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; Cb1-Cb10, cerebellar lobule 1-10; cc, corpus callosum; Cd, caudate nucleus; CM, central medial thalamic nucleus; cp, cerebral peduncle, basal part; DA, dorsoanterior extrastriate area; DG, dentate gyrus; DM (visual), dorsomedial area; EGP, external globus pallidus; f, fornix; IC, inferior colliculus; ic, internal capsule; icp, inferior cerebellar peduncle (restiform body); IGP, internal globus pallidus; Lat, lateral (dentate) cerebellar nucleus; LD, lateral dorsal thalamic nucleus; M1, primary motor area; MD, mediodorsal thalamic nucleus; ml, medial lemniscus; opt, optic tract; OF, orbitofrontal cortex; PAG, periaqueductal gray; Pn, pontine nuclei; PP, posterior parietal cortex; Pu, putamen; Pul, pulvinar nuclei; py, pyramidal tract; RN, red nucleus; Rt, reticular thalamic nucleus; RTP, nucleus reticularis tegmenti pontis; S, subiculum; S1, primary somatosensory area; SC, superior colliculus; scp, superior cerebellar peduncle (brachium conjunctivum); SI, substantia nigra, compact; SNr, substantia nigra, reticular part; STh, subthalamic nucleus; V1, primary visual cortex; V2, Second visual area; VA, ventral anterior thalamic nucleus; VACo, ventral anterior cortical nucleus of the amygdale; VL, ventral lateral thalamic nucleus; VPM, ventral posteromedial thalamic nucleus; ZI, zona incerta.

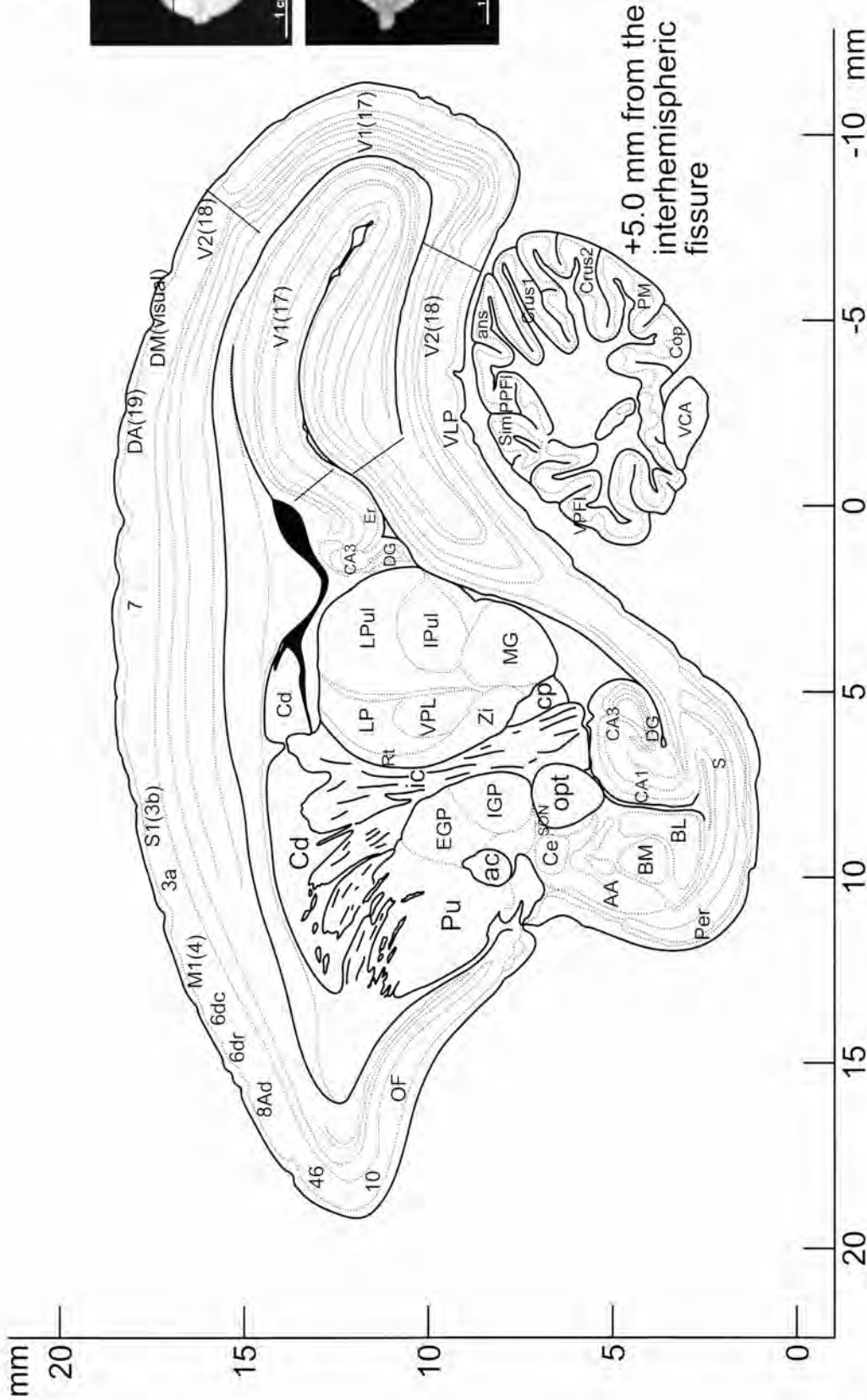




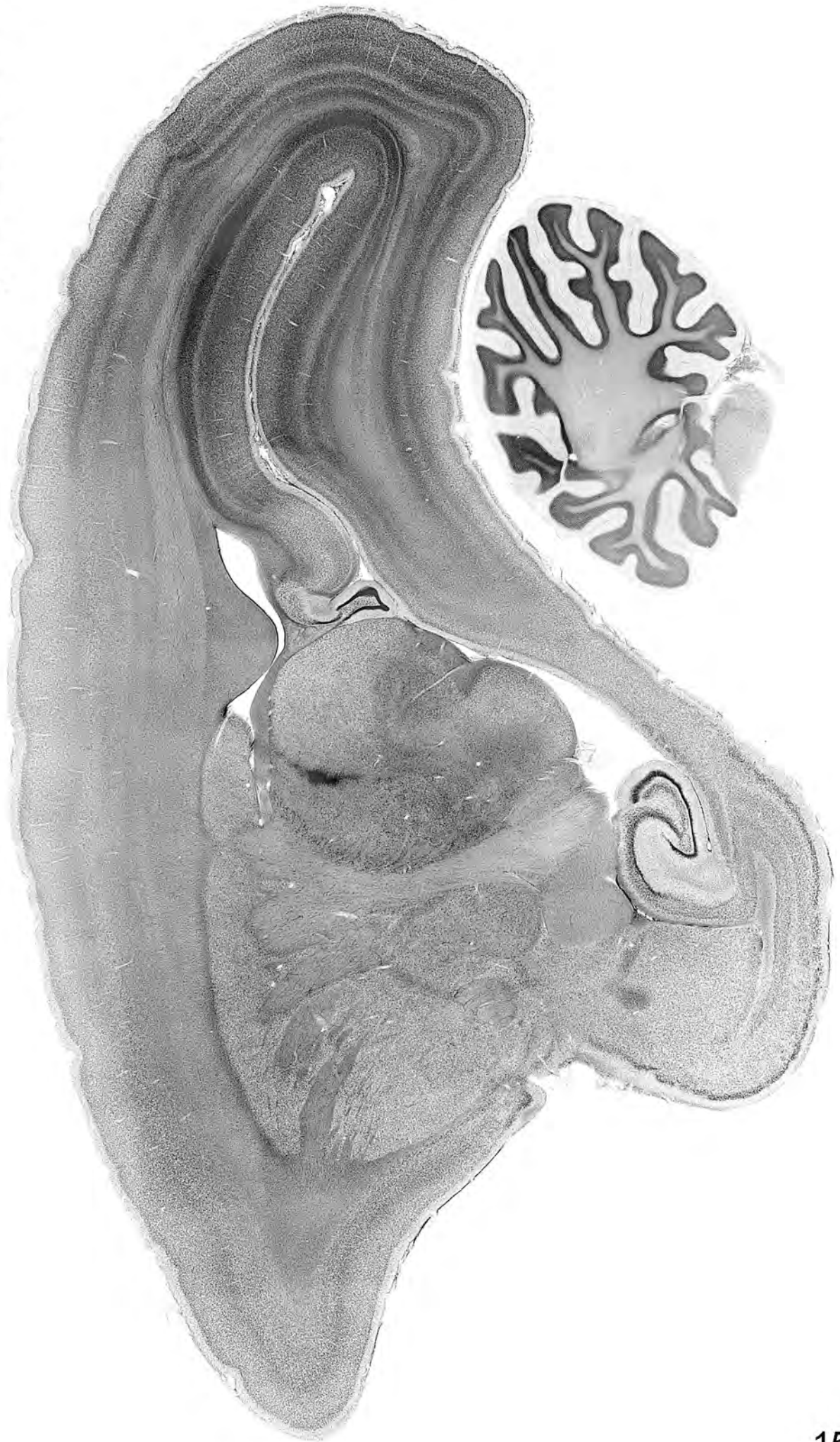
3a, 3b, 4, 6dc, 6dr, 7, 8Av, 9, 10, 17, 18, 19, Brodmann's parcellation of the cortex; 5N, trigeminal nucleus; 7N, facial nucleus; AA, anterior amygdaloid area; ac, anterior commissure; ans, ansiform lobule of the cerebellum; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cal, calcarine sulcus; Cb5, cerebellar lobule 5; Cb6, cerebellar lobule 6; cc, corpus callosum; Cd, caudate nucleus; CM, central medial thalamic nucleus; Cop, copula of the pyramis; cp, cerebral peduncle, basal part; Crus1, crus1 of the ansiform lobule; Crus2, crus 2 of the ansiform lobule; DA, dorsoanterior extrastriate area; DG, dentate gyrus; DM (visual area), dorsomedial area; EGP, external globus pallidus; f, fornix; IC, inferior colliculus; ic, internal capsule; icp, inferior cerebellar peduncle (restiform body); IGP, internal globus pallidus; LD, lateral (dentate) cerebellar nucleus; LD, lateral dorsal thalamic nucleus; LVeN, lateral vestibular nucleus; mcp, middle cerebellar peduncle; MM1, primary motor area; MD, mediadorsal thalamic nucleus; Me, medial amygdaloid nucleus; MG, medial geniculate nucleus; OF, orbitofrontal cortex; opt, optic tract; PM, paramedian lobule; PP, posterior parietal cortex; PPFI, posterior paraflocculus; Pu, putamen; Pul, pulvinar nuclei; Rt, reticular thalamic nucleus; S, subiculum; S1, primary somatosensory area; SI, substantia innominata; Sim, simple lobule; SN, substantia nigra; SON, supraoptic nucleus; STh, subthalamic nucleus; V1, primary visual cortex; V2, second visual area; VA, ventral anterior thalamic nucleus; VL, ventral lateral thalamic nucleus; VPFI, ventral paraflocculus; ZI, zona incerta.



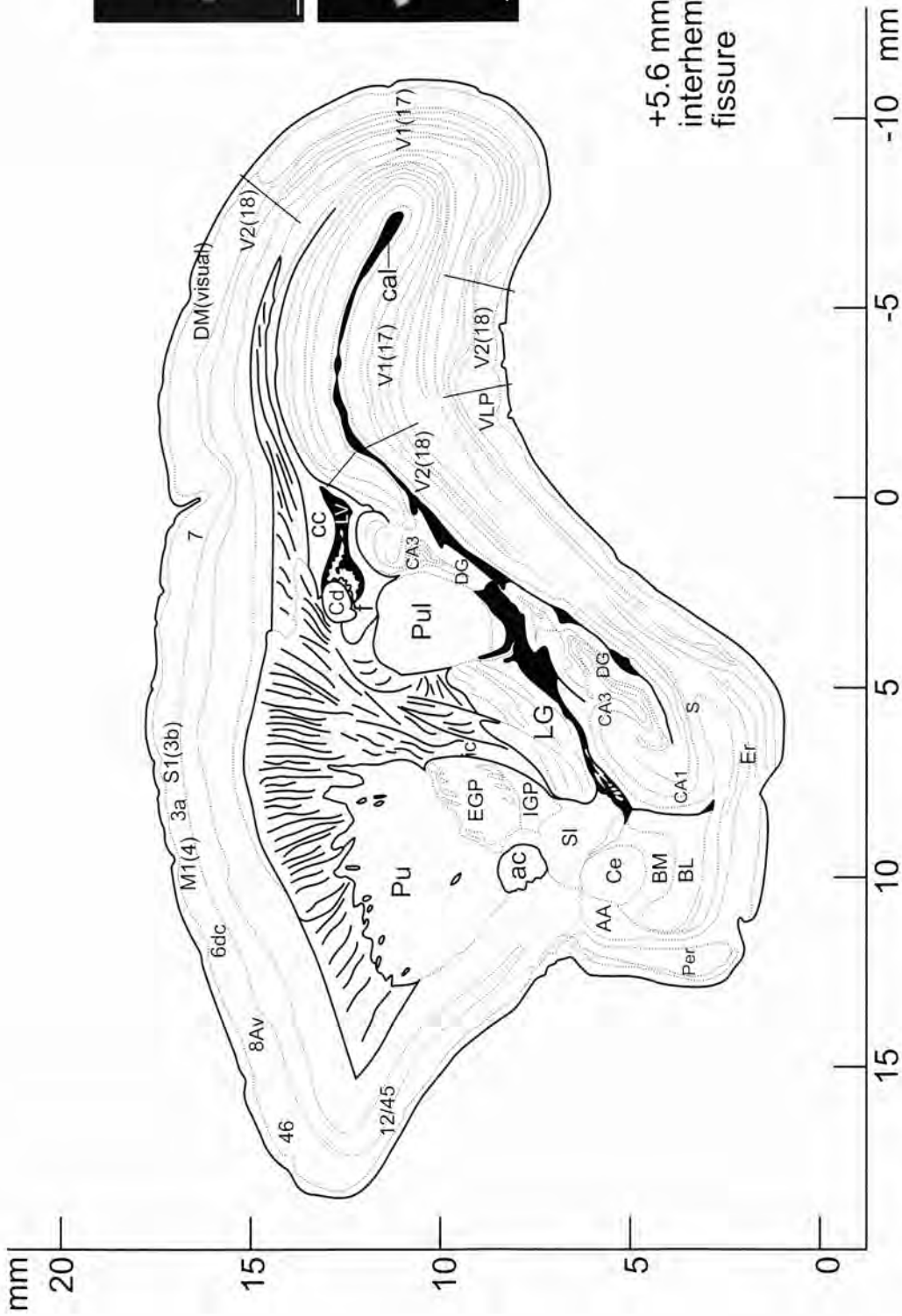
psTr-08



3a, 3b, 4, 6dc, 6dr, 7, 8Ad, 10, 17, 18, 19, 46, Brodmann's parcellation of the cortex; AA, anterior amygdaloid area; ac, anterior commissure; ans, ansiform lobule of the cerebellum; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; Cd, caudate nucleus; Ce, central amygdaloid nucleus; Cop, copula of the pyramids; cp, cerebral peduncle; basal part; Crus1, crus 1 of the ansiform lobule; Crus2, crus 2 of the ansiform lobule; DA, dorsoanterior extrastriate area; EGP, external globus pallidus; Er, entorhinal cortex; ic, internal capsule; IGP, internal globus pallidus; LP, lateral posterior nucleus; LPul, lateral posterior nucleus; M1, primary motor area; MG, medial geniculate nucleus; OF, orbitofrontal cortex; opt, optic tract; Per, periamygdaloid nucleus; PM, paramedian lobule; PPF, posterior paraflocculus; Pu, putamen; Rt, reticular thalamic nucleus; S, subiculum; S1, primary somatosensory area; Sim, simple lobule; SON, supraoptic nucleus; V1, primary visual cortex; V2, second visual area; VCA, ventral cochlear nucleus, anterior part; VLP, Ventrolateral posterior extrastriate area; VPL, ventral posterolateral thalamic nucleus; VZ, zona incerta.

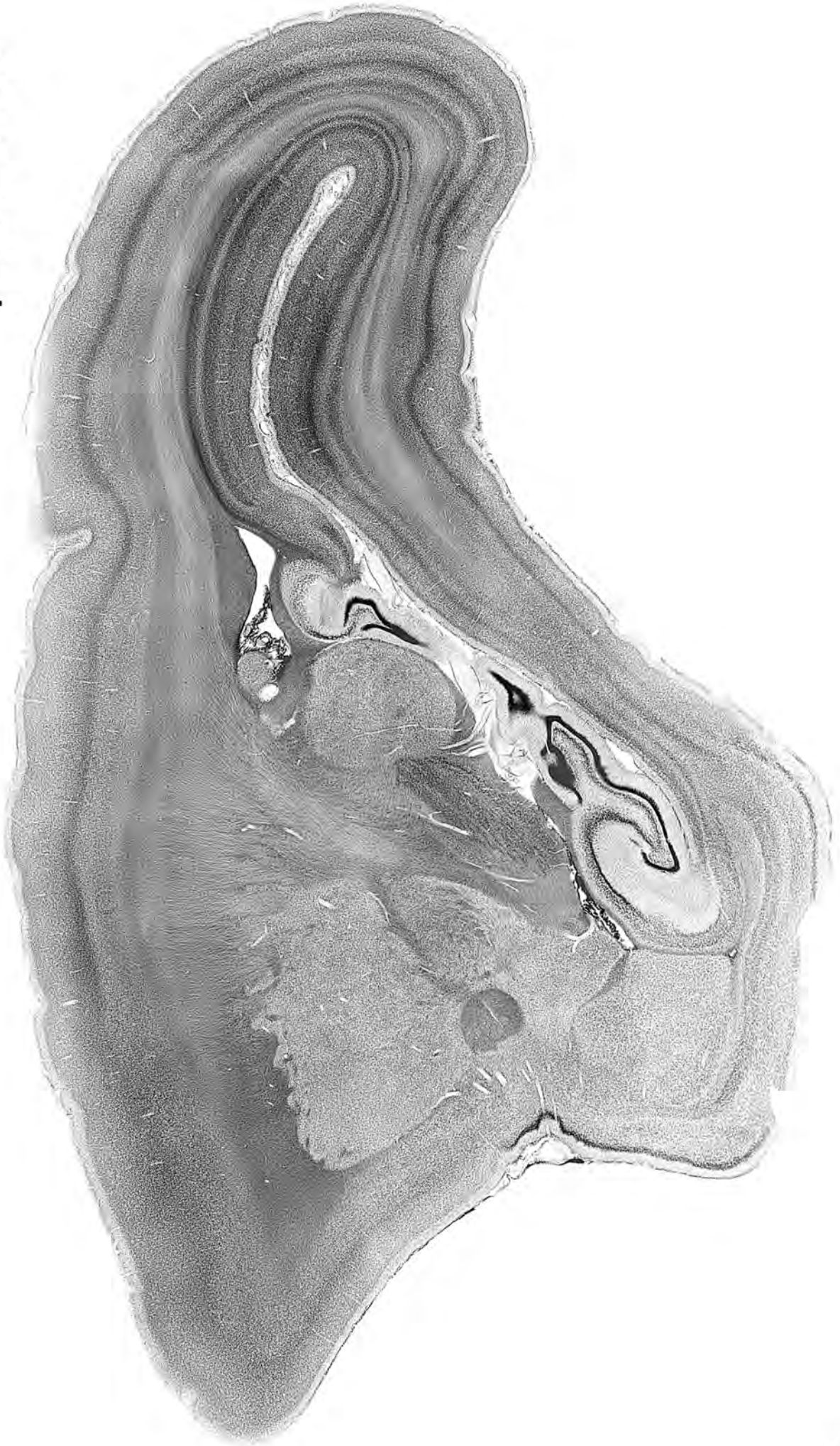


psTr-09

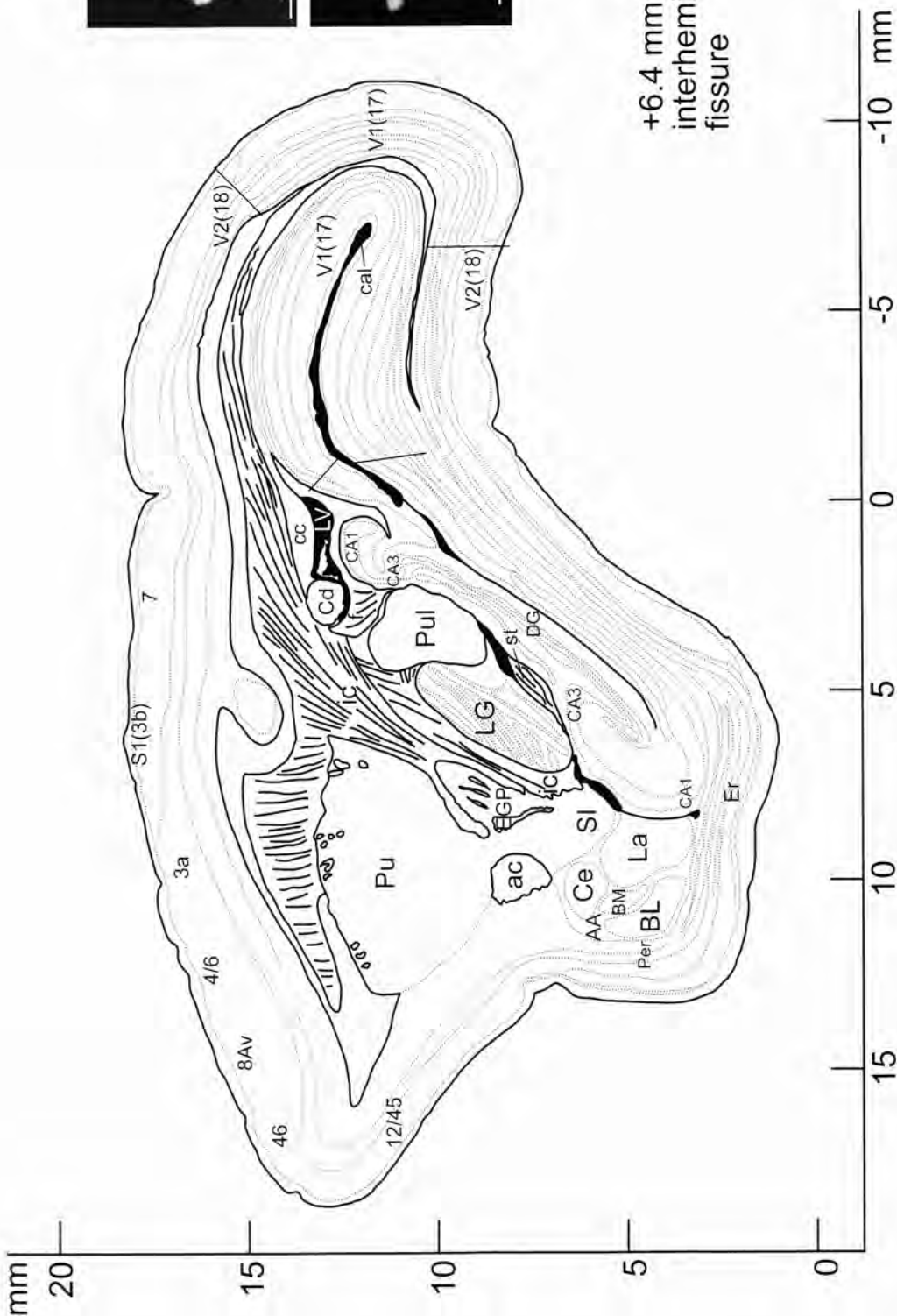


3a, 3b, 4, 6dc, 7, 8Av, 12/45, 17, 18, 46, Brodmann's parcellation of the cortex; AA, anterior amygdaloid area; ac, anterior commissure; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cal, calcarine sulcus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; DG, dentate gyrus; DM (visual area), dorsomedial area; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; IGP, internal globus pallidus; LG, lateral geniculate nucleus; LV, lateral ventricle; M1, primary motor area; Per, periamygdaloid nucleus; Pu, putamen; Pul, pulvinar nuclei; S, subiculum; S1, primary somatosensory area; SI, substantia innominata; V1, primary visual cortex; V2, second visual area; VLP, ventrolateral posterior extrastriate area.

psNissl-09



psTr-10

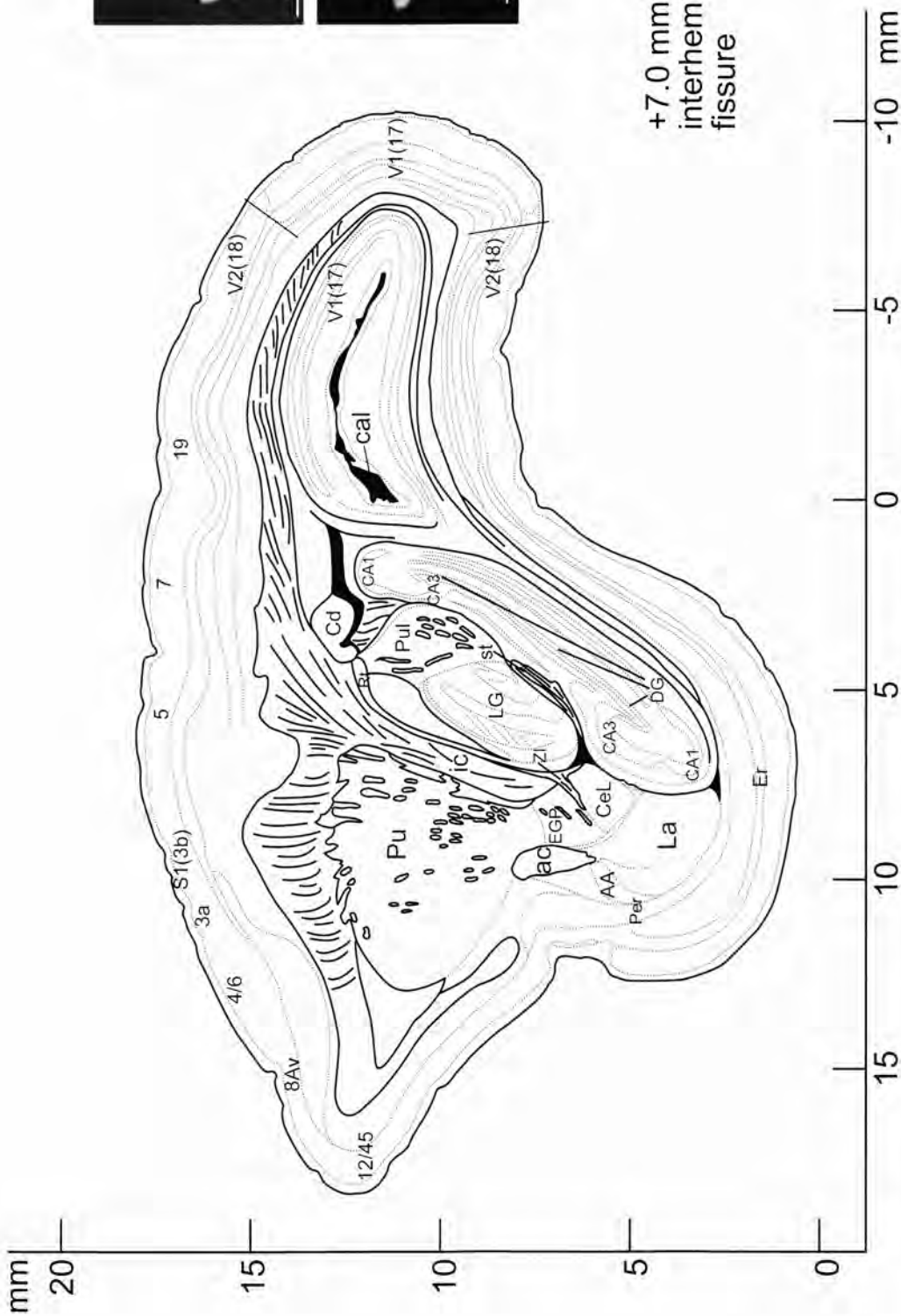


3a, 3b, 4/6, 7, 8Av, 12/45, 17, 18, 46, Brodmann's parcellation of the cortex; AA, anterior amygdaloid area; ac, anterior commissure; BL, basolateral amygdaloid nucleus; BM, basomedial amygdaloid nucleus; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cal, calcarine sulcus; cc, corpus callosum; Cd, caudate nucleus; Ce, central amygdaloid nucleus; DG, dentate gyrus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; La, lateral amygdaloid nucleus; LG, lateral geniculate nucleus; LV, lateral ventricle; Per, periamygdaloid nucleus; Pu, putamen; Pul, pulvinar nuclei; S1, primary somatosensory area; SI, substantia innominata; st, stria terminalis; V1, primary visual cortex; V2, Second visual area.

psNissl-10



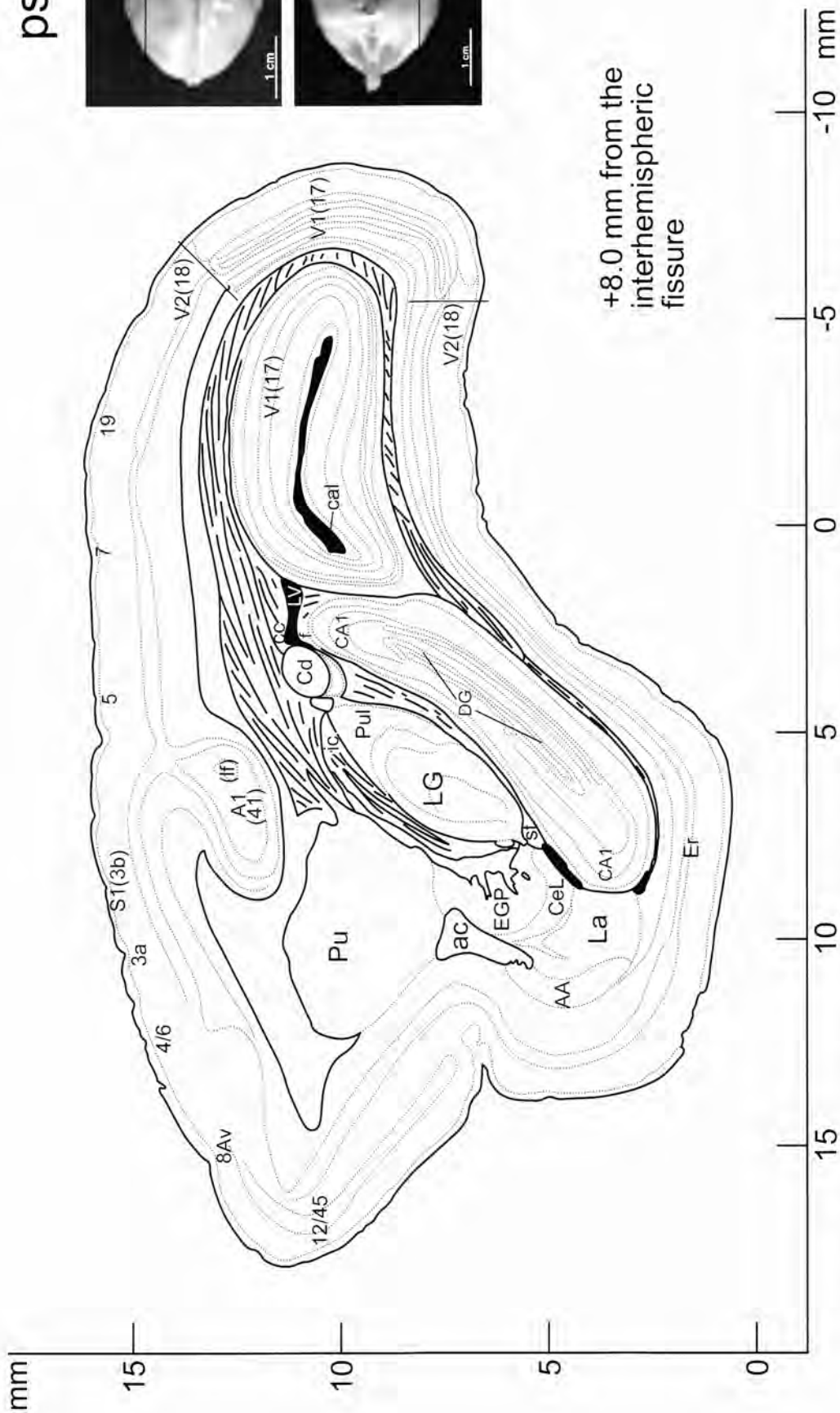
psTr-11



3a, 3b, 4/6, 5, 7, 8Av, 12/45, 17, 18, 19, Brodmann's parcellation of the cortex; AA, anterior amygdaloid area; ac, anterior commissure; CA1, field CA1 of hippocampus; CA3, field CA3 of hippocampus; cal, calcarine sulcus; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; DG, dentate gyrus; EGP, external globus pallidus; Er, entorhinal cortex; ic, internal capsule; La, lateral amygdaloid nucleus; LG, lateral geniculate nucleus; Per, periamygdaloid nucleus; Pu, putamen; Pul, pulvinar nuclei; Rt, reticular thalamic nucleus; st, stria terminalis; S1, primary somatosensory area; V1, primary visual cortex; V2, second visual area; ZI, zona incerta.

psNissl-11





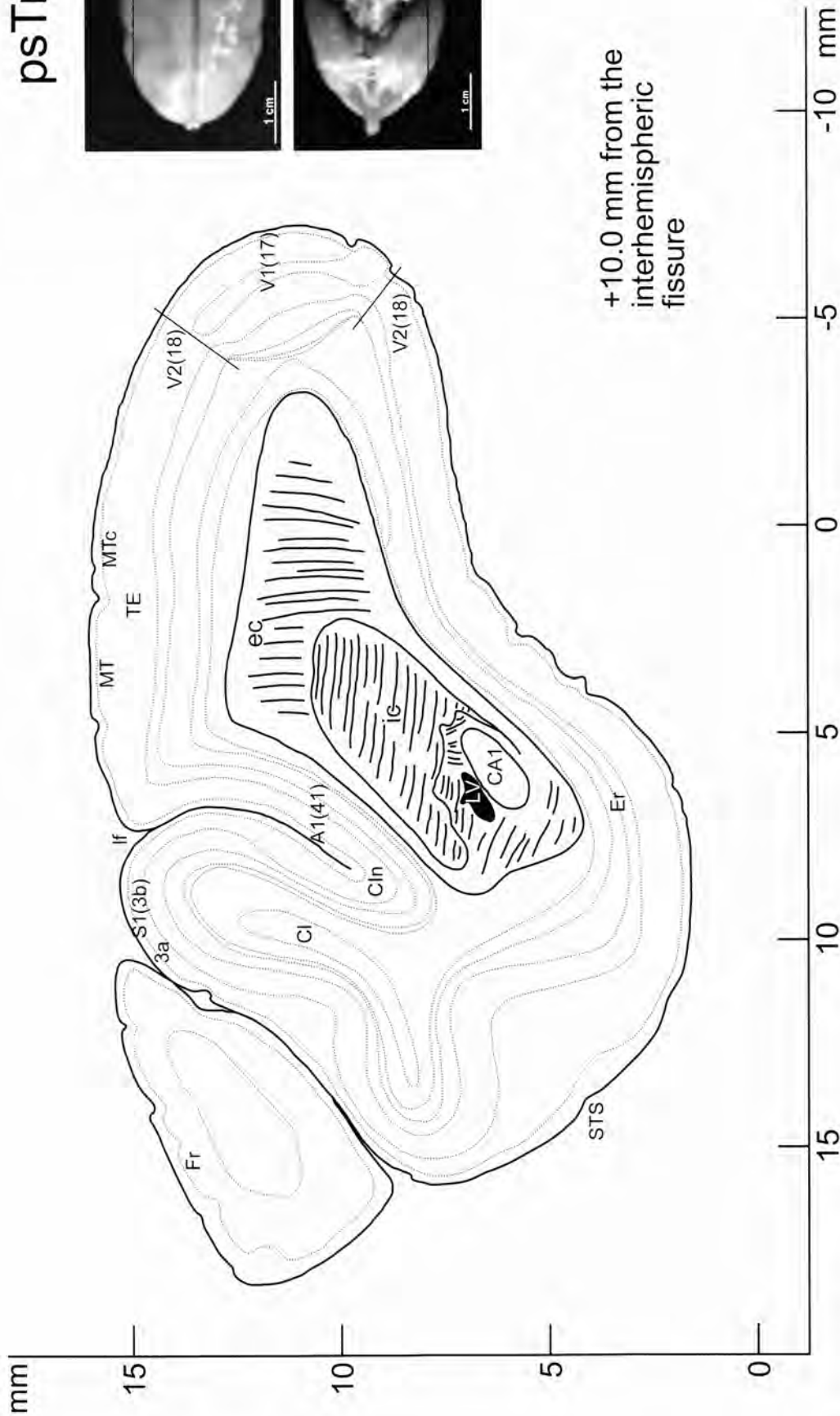
3a, 3b, 4/6, 5, 7, 8Av, 12/45, 17, 18, 19, 41, Brodmann's parcellation of the cortex; A1, primary auditory area; AA, anterior amygdaloid area; ac, anterior commissure; CA1, field CA1 of hippocampus; cal, calcarine sulcus; cc, corpus callosum; Cd, caudate nucleus; CeL, central amygdaloid nucleus, lateral division; DG, dentate gyrus; EGP, external globus pallidus; Er, entorhinal cortex; f, fornix; ic, internal capsule; La, lateral amygdaloid nucleus; lf, lateral fissure; LG, lateral geniculate nucleus; LV, lateral ventricle; Pu, putamen; Pul, pulvinar nuclei; S1, primary somatosensory area; st, stria terminalis; V1, primary visual cortex; V2, second visual area.

psTr-12

psNissl-12



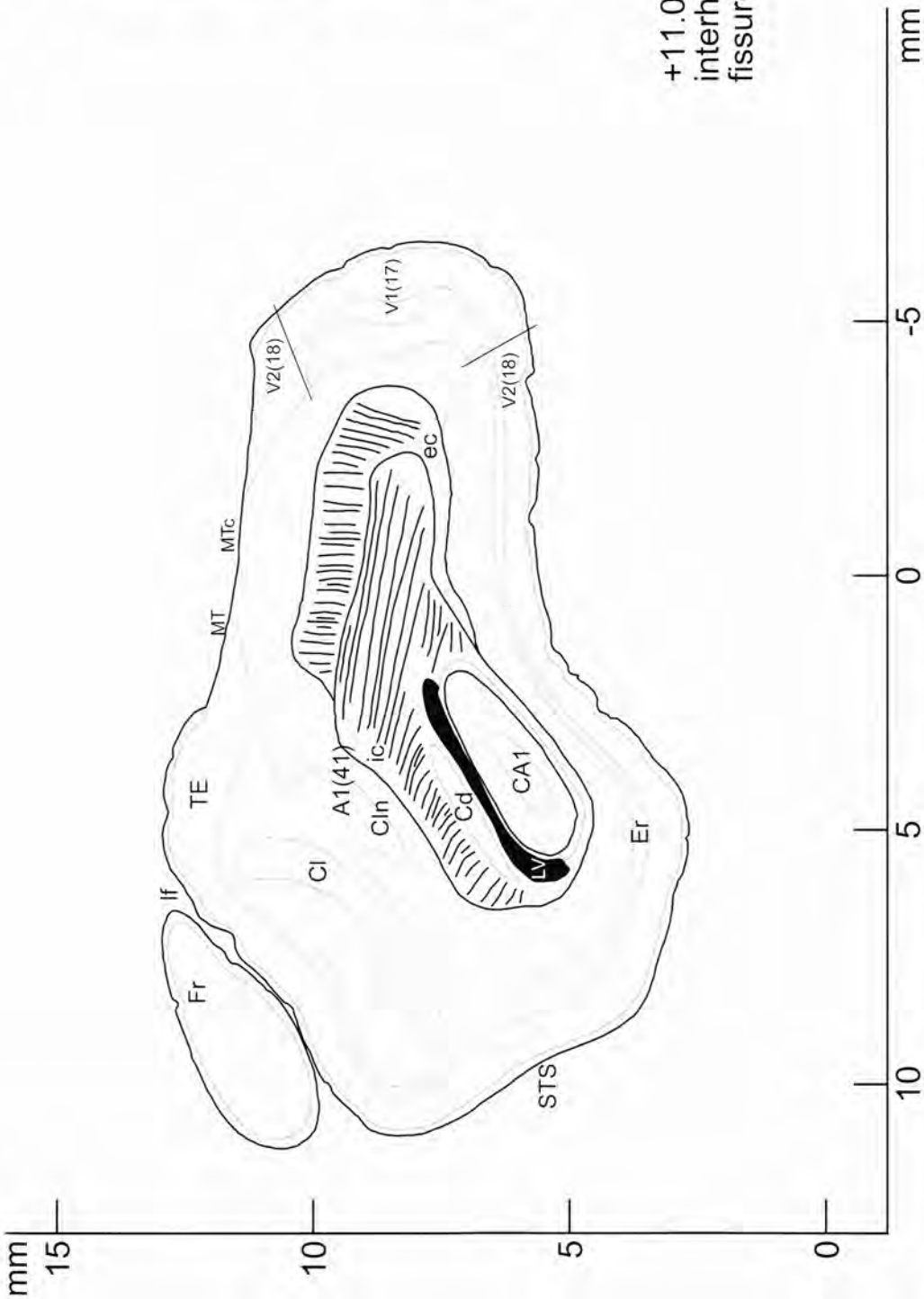
psTr-13



3a, 3b, 17, 18, 41, Brodmann's parcellation of the cortex; A1, primary auditory area; CA1, field CA1 of hippocampus; Cln, insularis cortex; Cl, claudstrum; ec, external capsule; Er, entorhinal cortex; Fr, frontal cortex; ic, internal capsule; If, lateral fissure; LV, lateral ventricle; MT, middle temporal visual area; MTc, middle temporal visual area; S1, primary somatosensory area; STS, superior somatosensory area; TE, temporal sulcus; V1, primary visual cortex; V2, second visual area.

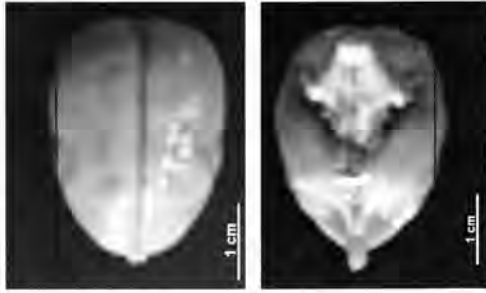
psNissl-13





+11.0 mm from the interhemispheric fissure

psTr-14



17, 18, 41, Brodmann's parcellation of the cortex; A1, primary auditory area; CA1, field CA1 of hippocampus; Cd, caudate nucleus; Cln, insularis cortex; Cl, claustrum; ec, external capsule; Er, entorhinal cortex; Fr, frontal cortex; ic, internal capsule; If, lateral fissure; LV, lateral fissure; MT, middle temporal visual area; MTc, middle temporal crescent visual area; STS, superior temporal sulcus; TE, temporal cortex; V1, primary visual cortex; V2, second visual area.

psNissl-14



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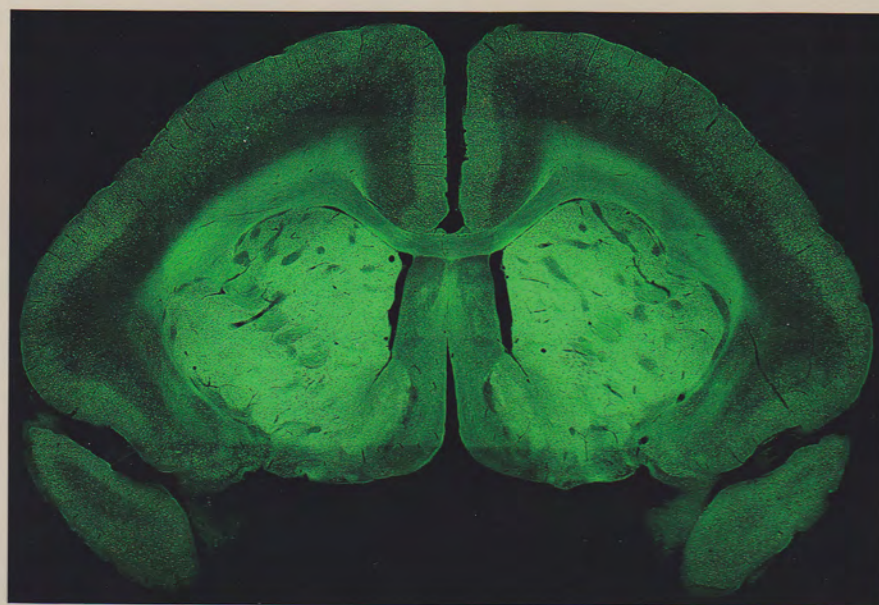
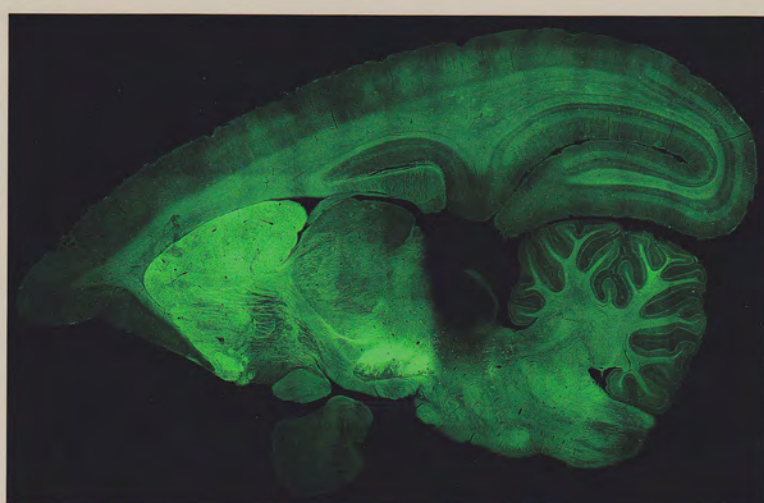
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Stereotaxic Atlas of the Marmoset Brain

with Immunohistochemical
Architecture and MR Images

Volume 2

Immunohistochemical
plates and MR images



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architecture and MR images

Volume 2

Immunohistochemical plates
and MR images

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Contents

1. General construction of this atlas	1
2. Tables of Plates.....	2
3. Plates	5
3.1. calbindin immunohistochemistry	7
3.2. calretinin immunohistochemistry	69
3.3. tyrosine hydroxylase immunohistochemistry.....	131
3.4. MRI data	175

1. General construction of this atlas

Contents of Vol. 1

Coronal or parasagittal plates of serial sections stained with cresyl violet (Nissl staining) and the accompanying diagrams with labeling of structures. Corresponding plates of adjacent immunohistochemically-stained sections and MRI data in Vol. 2 are shown in the Tables of plates. Stereotaxic coordinates are indicated in the diagrams.

Contents of Vol. 2

Coronal or parasagittal plates of serial sections immunostained with anti-calbindin, anti-calretinin or anti-tyrosine hydroxylase antibody, and MRI data in the serial coronal or parasagittal sections. Corresponding plates of coronal or parasagittal sections stained with cresyl violet (Nissl staining) and the accompanying diagrams with labeling of structures in Vol. 1 are shown in the Tables of plates.

2. Tables of plates

coronal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
cTr-01	cNissl-01				
cTr-02	cNissl-02				MRI cor-01
cTr-03	cNissl-03				
cTr-04	cNissl-04				MRI cor-02
cTr-05	cNissl-05				MRI cor-03
cTr-06	cNissl-06	cCalb-06	cCR-06	cTH-06	MRI cor-04
cTr-07	cNissl-07				
cTr-08	cNissl-08	cCalb-08	cCR-08	cTH-08	
cTr-09	cNissl-09	cCalb-09	cCR-09	cTH-09	MRI cor-05
cTr-10	cNissl-10				
cTr-11	cNissl-11	cCalb-11	cCR-11	cTH-11	
cTr-12	cNissl-12	cCalb-12	cCR-12	cTH-12	MRI cor-06
cTr-13	cNissl-13				
cTr-14	cNissl-14	cCalb-14	cCR-14	cTH-14	
cTr-15	cNissl-15	cCalb-15	cCR-15	cTH-15	MRI cor-07
cTr-16	cNissl-16				MRI cor-08
cTr-17	cNissl-17	cCalb-17	cCR-17	cTH-17	
cTr-18	cNissl-18	cCalb-18	cCR-18	cTH-18	MRI cor-09
cTr-19	cNissl-19	cCalb-19	cCR-19		
cTr-20	(cCalb-20)	cCalb-20	cCR-20		MRI cor-10
cTr-21	cNissl-21	cCalb-21	cCR-21	cTH-21	
cTr-22	cNissl-22	cCalb-22	cCR-22	cTH-22	
cTr-23	cNissl-23				
cTr-24	cNissl-24				MRI cor-11
cTr-25	cNissl-25				
cTr-26	cNissl-26	cCalb-26	cCR-26	cTH-26	
cTr-27	(cCalb-27)	cCalb-27		cTH-27	
cTr-28	(cCalb-28)	cCalb-28	cCR-28	cTH-28	
cTr-29	(cCalb-29)	cCalb-29	cCR-29		MRI cor-12
cTr-30	cNissl-30		cCR-30	cTH-30	
cTr-31	cNissl-31		cCR-31	cTH-31	
cTr-32	(cCalb-32)	cCalb-32	cCR-32	cTH-32	
cTr-33	cNissl-33	cCalb-33	cCR-33	cTH-33	MRI cor-13
cTr-34	cNissl-34	cCalb-34	cCR-34	cTH-34	
cTr-35	cNissl-35	cCalb-35	cCR-35	cTH-35	
cTr-36	cNissl-36	cCalb-36	cCR-36	cTH-36	MRI cor-14
cTr-37	cNissl-37	cCalb-37	cCR-37	cTH-37	
cTr-38	cNissl-38	cCalb-38	cCR-38	cTH-38	
cTr-39	cNissl-39	cCalb-39			MRI cor-15
cTr-40	cNissl-40	cCalb-40		cTH-40	
cTr-41	cNissl-41			cTH-41	
cTr-42	cNissl-42				

coronal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
cTr-43	cNissl-43	cCalb-43	cCR-43	cTH-43	MRI cor-16
cTr-44	cNissl-44	cCalb-44	cCR-44	cTH-44	
cTr-45	cNissl-45	cCalb-45	cCR-45	cTH-45	
cTr-46	cNissl-46	cCalb-46	cCR-46	cTH-46	MRI cor-17
cTr-47	cNissl-47	cCalb-47	cCR-47	cTH-47	
cTr-48	cNissl-48	cCalb-48	cCR-48	cTH-48	
cTr-49	(cCalb-49)	cCalb-49	cCR-49	cTH-49	MRI cor-18
cTr-50	cNissl-50	cCalb-50	cCR-50		
cTr-51	cNissl-51	cCalb-51	cCR-51		
cTr-52	cNissl-52	cCalb-52	cCR-52		MRI cor-19
cTr-53	cNissl-53	cCalb-53	cCR-53		MRI cor-20
cTr-54	cNissl-54		cCR-54		MRI cor-21
cTr-55	cNissl-55		cCR-55		
cTr-56	cNissl-56	cCalb-56	cCR-56		
cTr-57	cNissl-57	cCalb-57	cCR-57		MRI cor-22
cTr-58	cNissl-58	cCalb-58	cCR-58		
cTr-59	cNissl-59	cCalb-59	cCR-59		
cTr-60	cNissl-60	cCalb-60	cCR-60		MRI cor-23
cTr-61	cNissl-61	cCalb-61	cCR-61		
cTr-62	cNissl-62	cCalb-62	cCR-62		
cTr-63	cNissl-63	cCalb-63	cCR-63		MRI cor-24
cTr-64	cNissl-64				
cTr-65	cNissl-65	cCalb-65	cCR-65		
cTr-66	cNissl-66	cCalb-66	cCR-66		MRI cor-25
					MRI cor-26

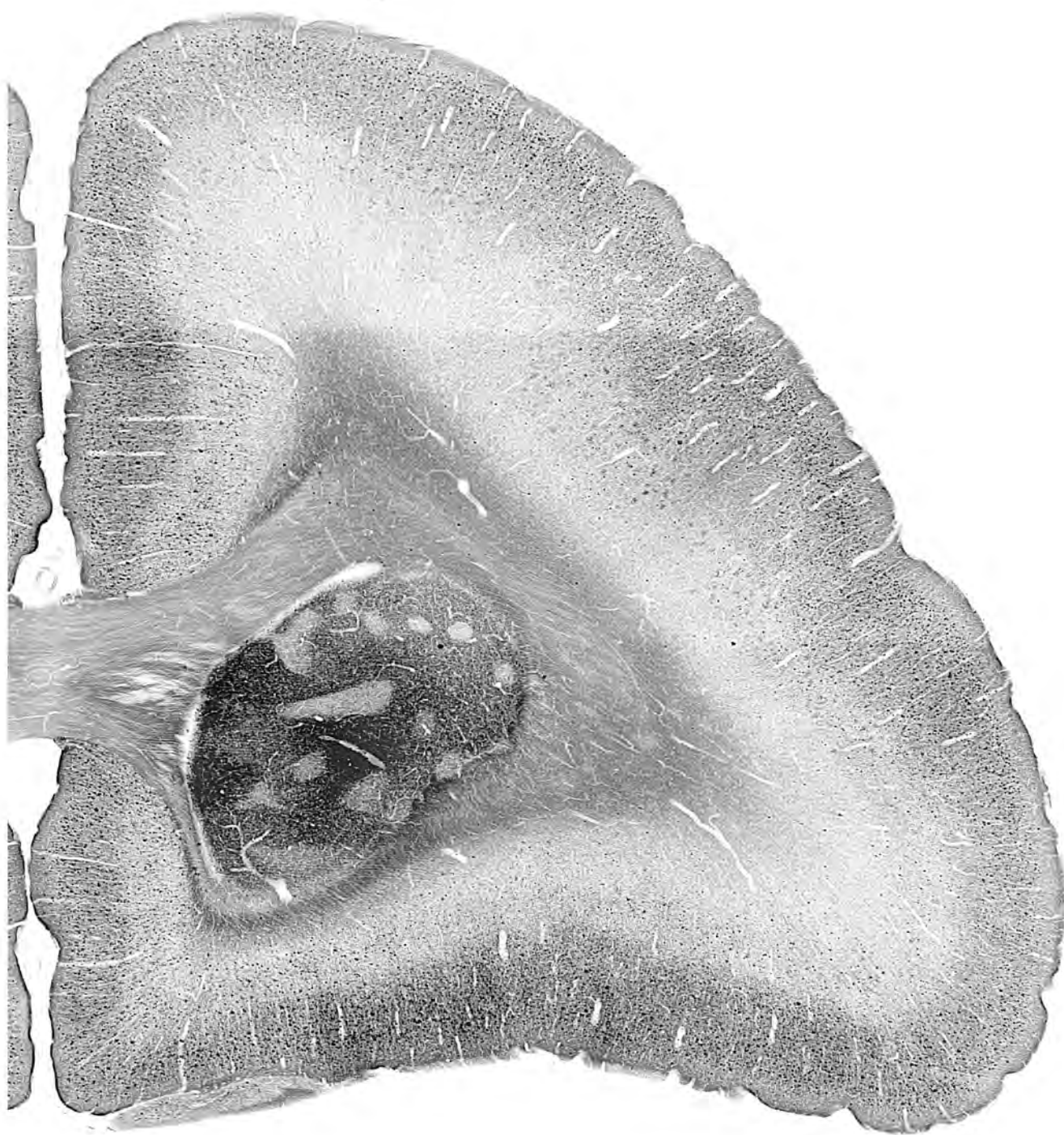
parasagittal plane					
tracing	Nissl staining	calbindin	calretinin	tyrosine hydroxylase	MRI
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psTr-02	psNissl-02	psCalb-02	psCR-02	psTH-02	MRI psg-02
psTr-03	psNissl-03	psCalb-03	psCR-03	psTH-03	MRI psg-03
psTr-04	psNissl-04	psCalb-04		psTH-04	
psTr-05	psNissl-05	psCalb-05	psCR-05	psTH-05	
psTr-06	psNissl-06	psCalb-06	psCR-06	psTH-06	MRI psg-04
psTr-07	psNissl-07	psCalb-07	psCR-07	psTH-07	
psTr-08	psNissl-08	psCalb-08	psCR-08	psTH-08	
psTr-09	psNissl-09	psCalb-09	psCR-09		MRI psg-05
psTr-10	psNissl-10	psCalb-10	psCR-10	psTH-10	
psTr-11	psNissl-11	psCalb-11	psCR-11	psTH-11	
psTr-12	psNissl-12	psCalb-12	psCR-12	psTH-12	MRI psg-06
psTr-13	psNissl-13	psCalb-13	psCR-13		
psTr-14	psNissl-14	psCalb-14			

3. Plates

3.1 Plates—calbindin immunohistochemistry

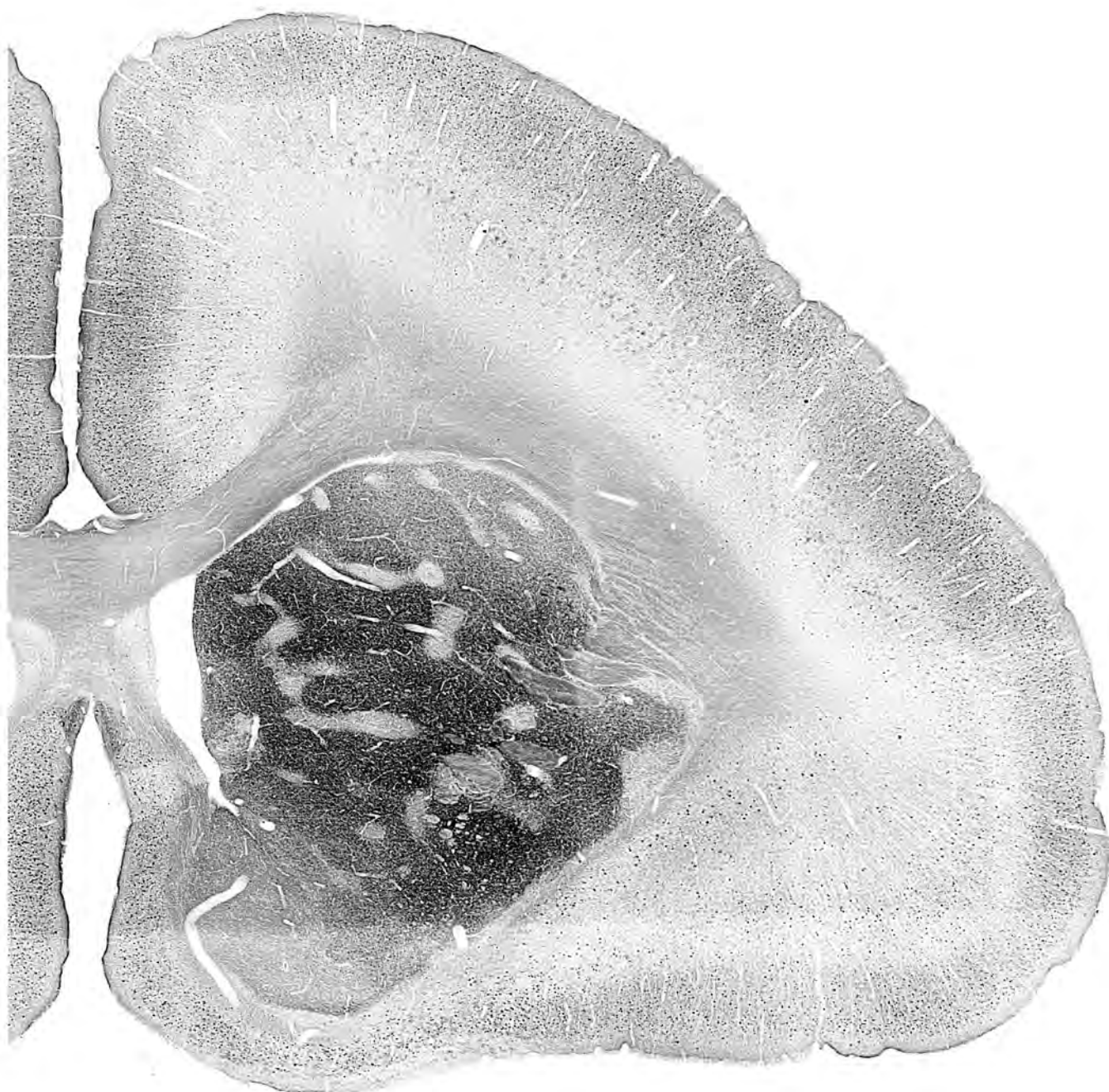
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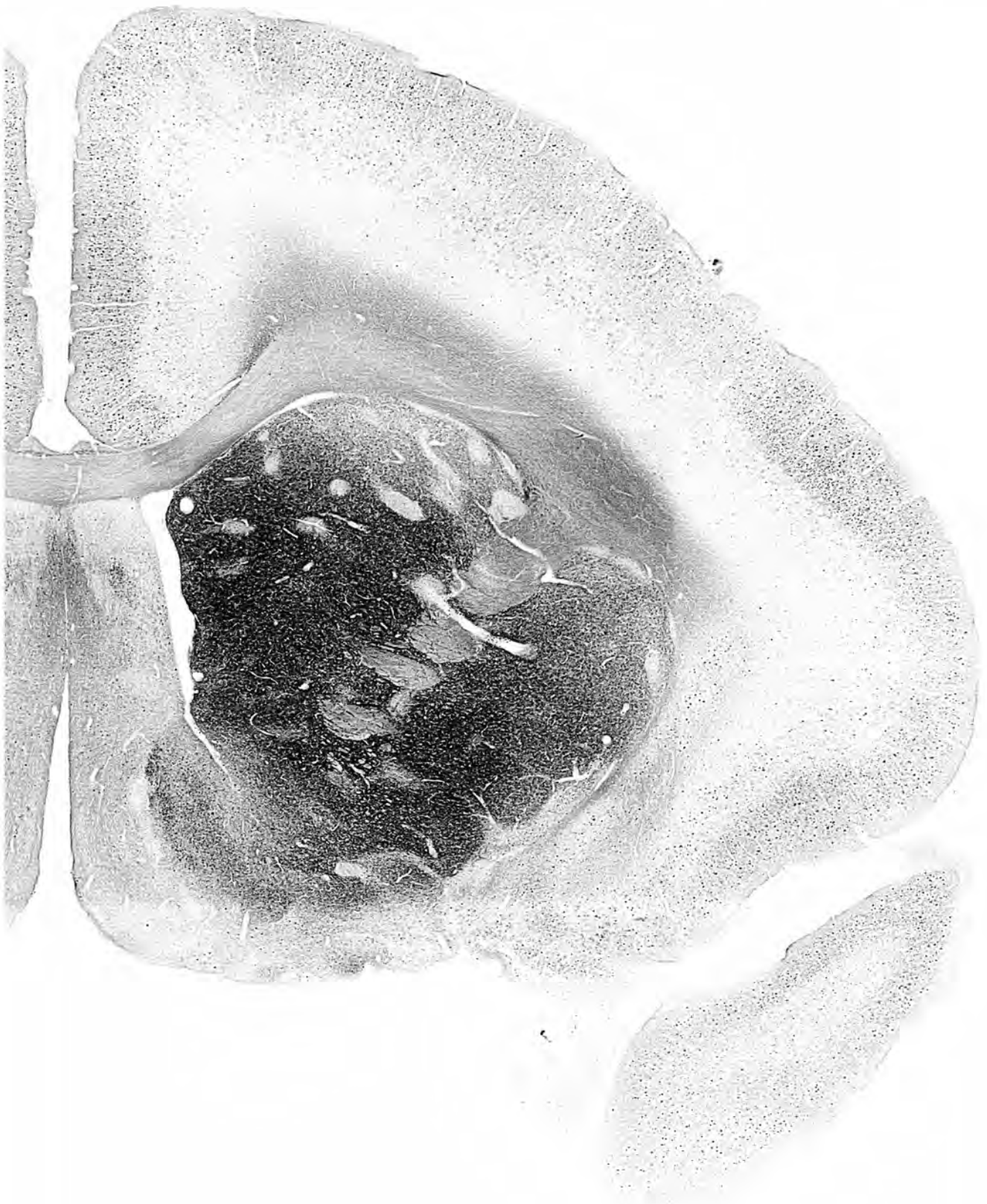


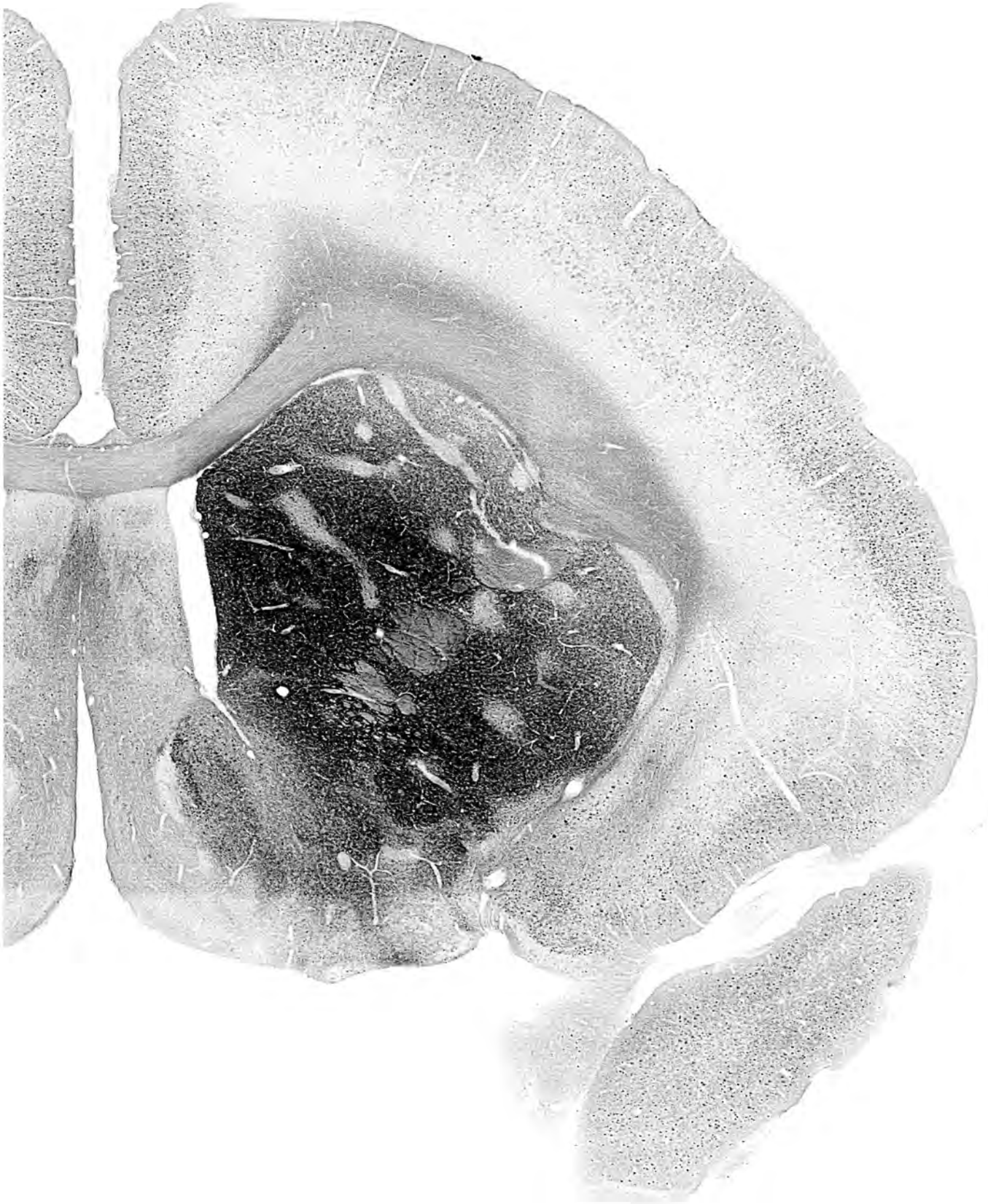


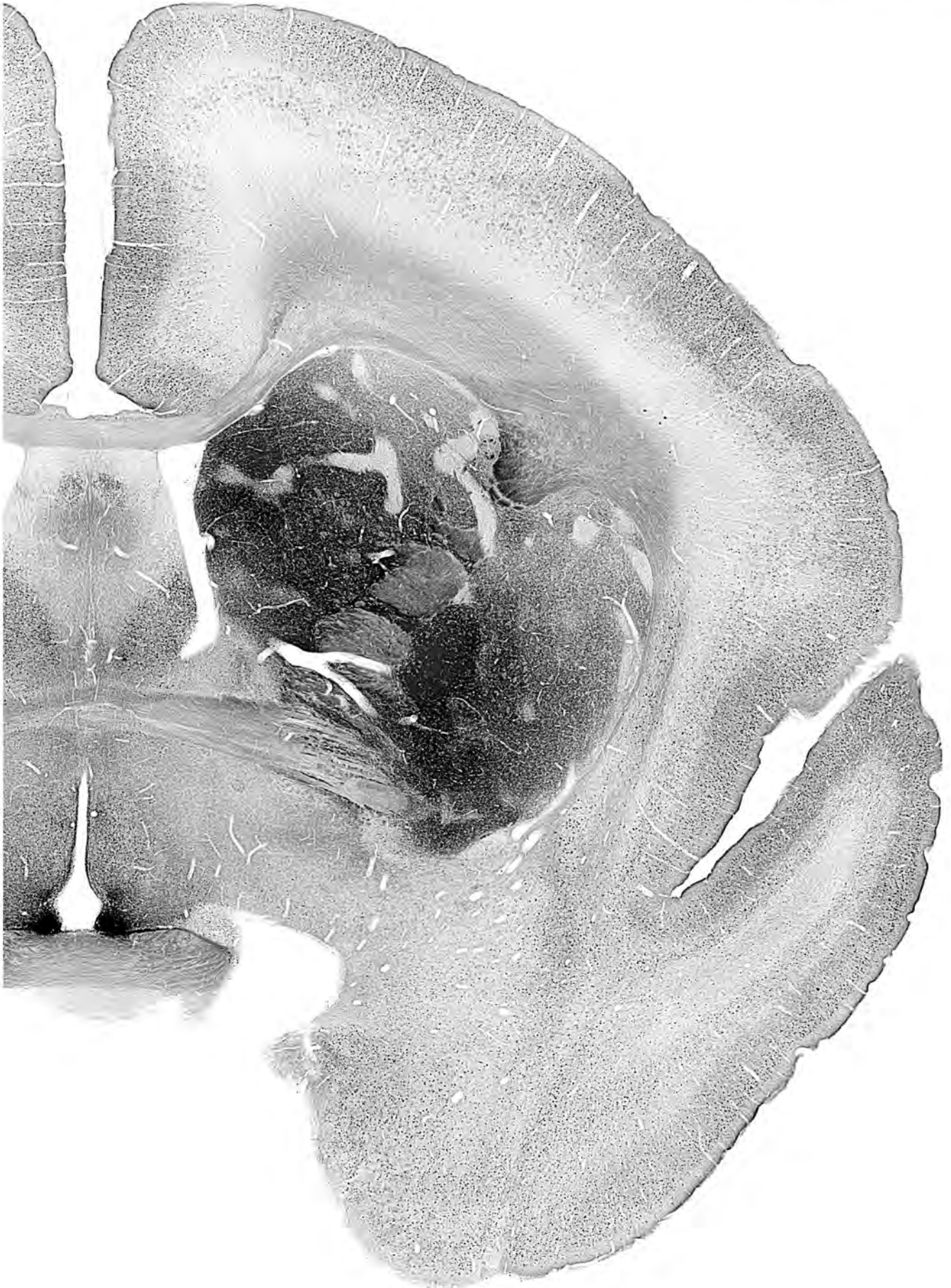


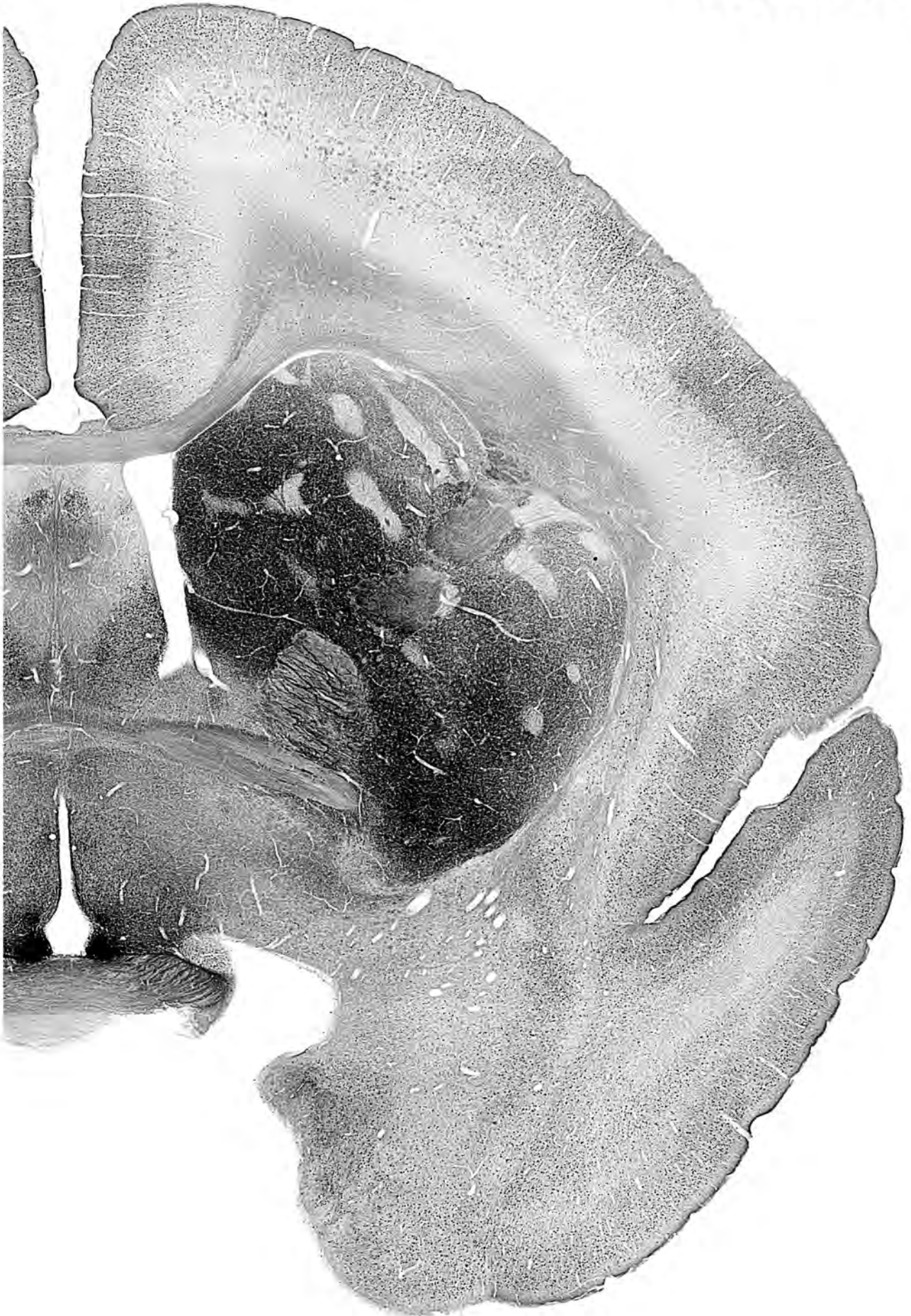




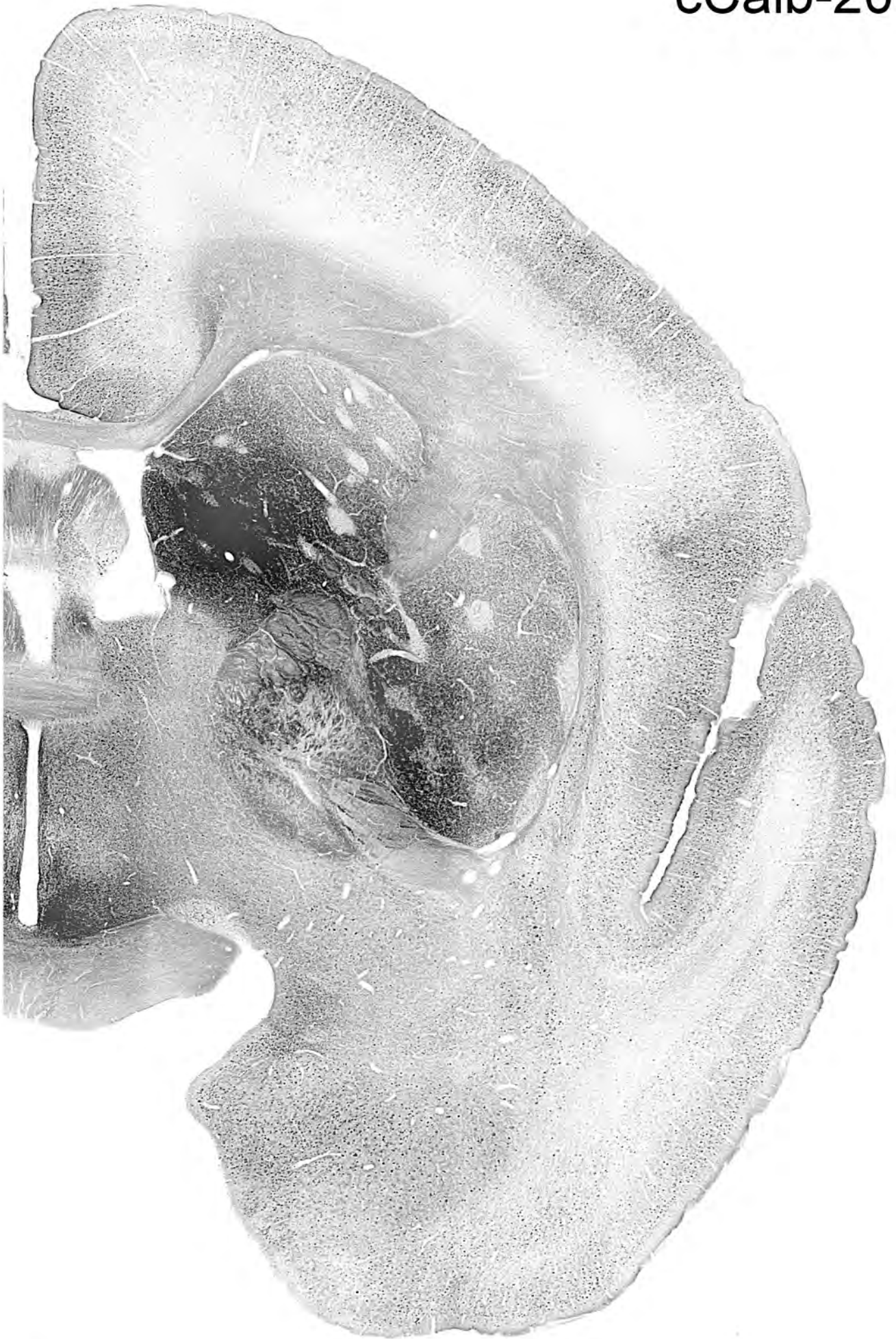


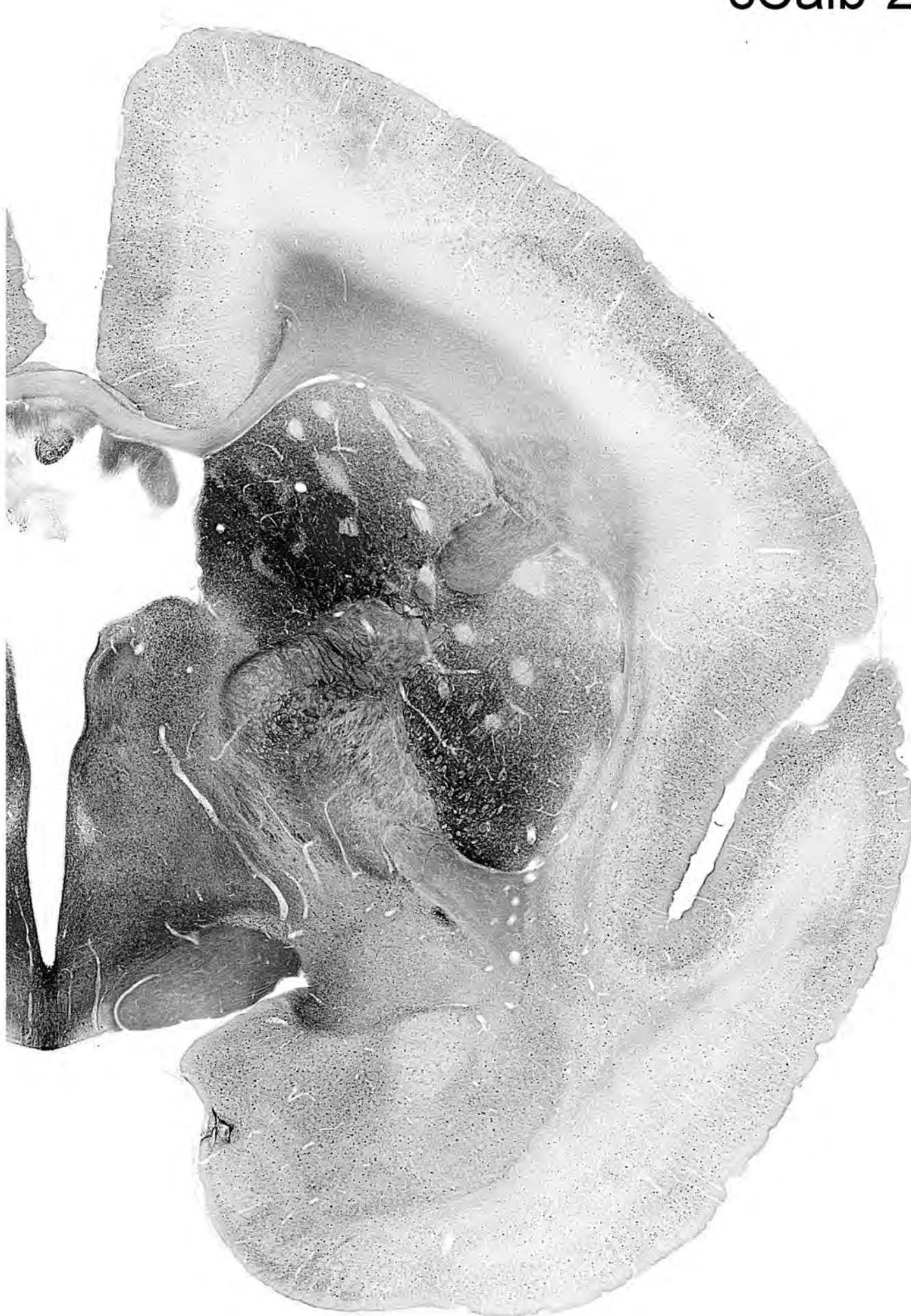




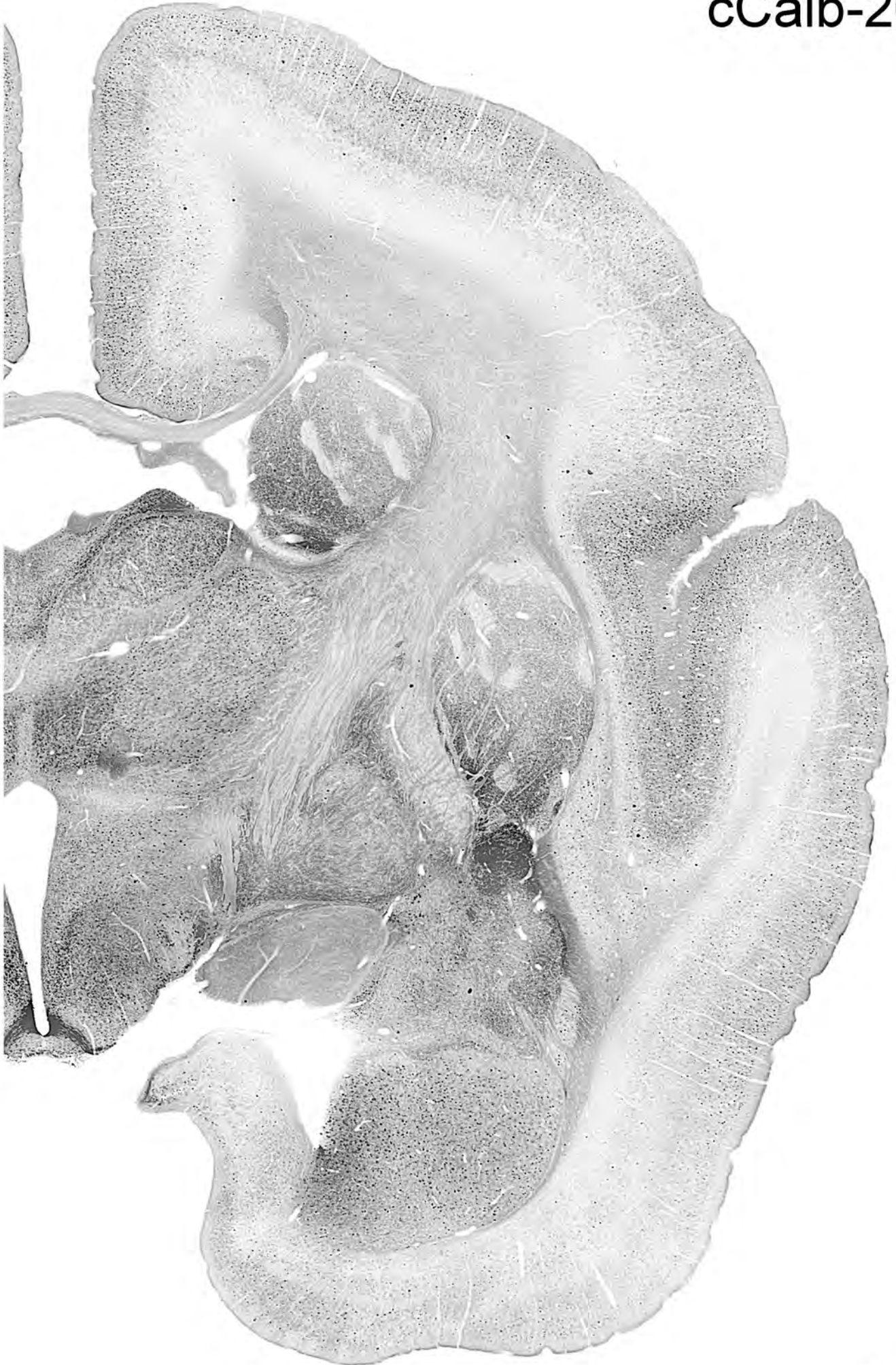


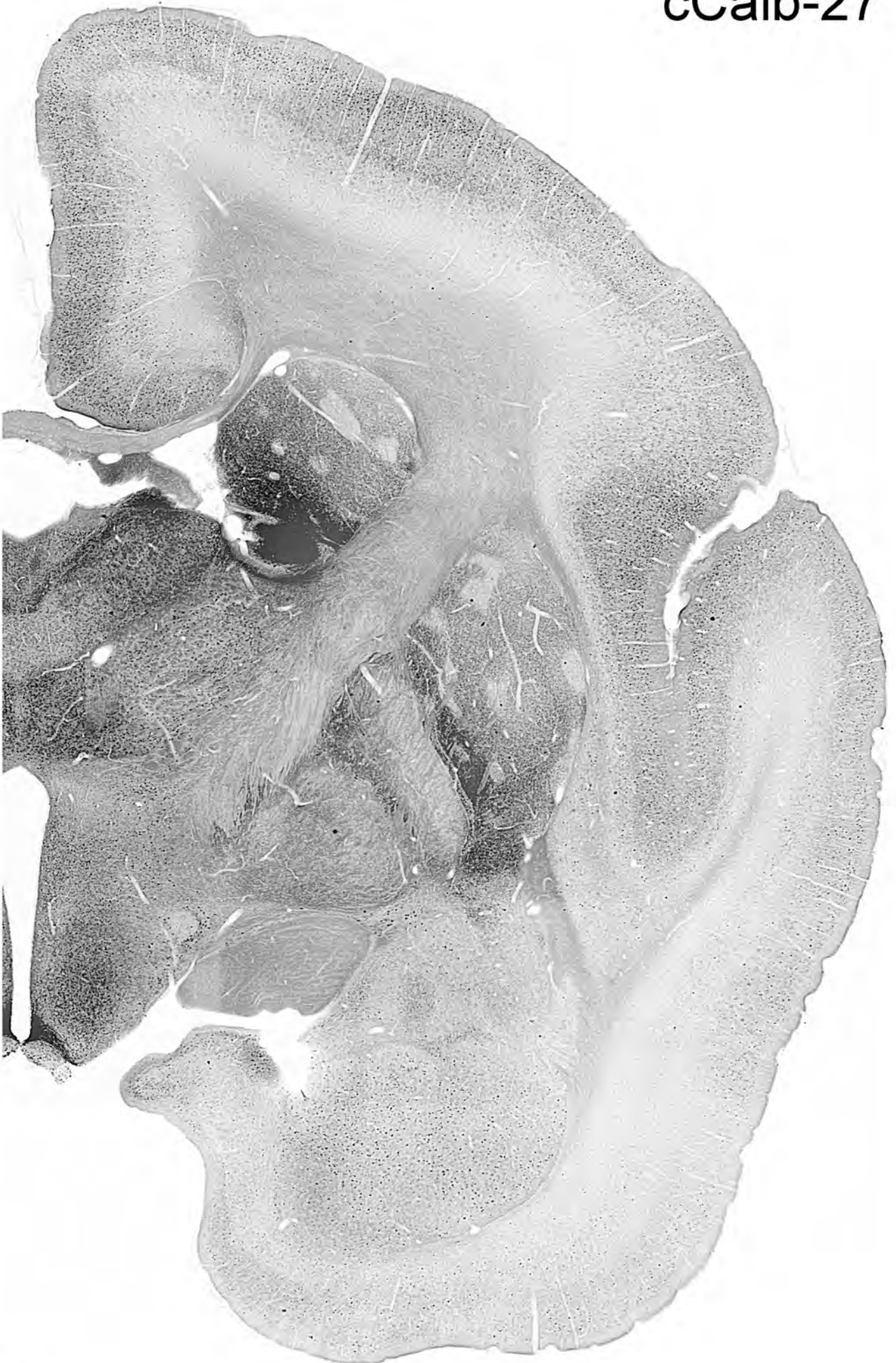




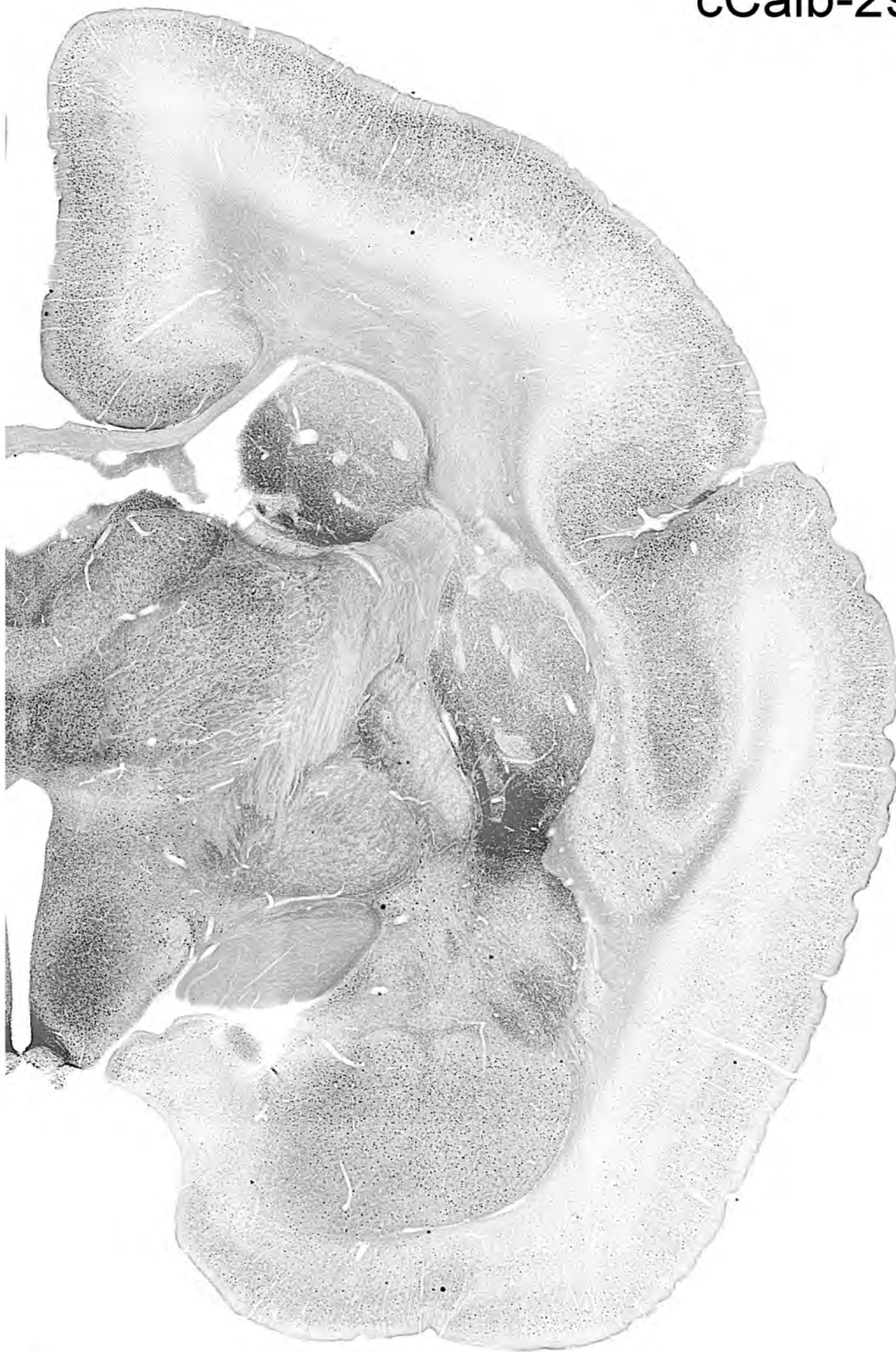










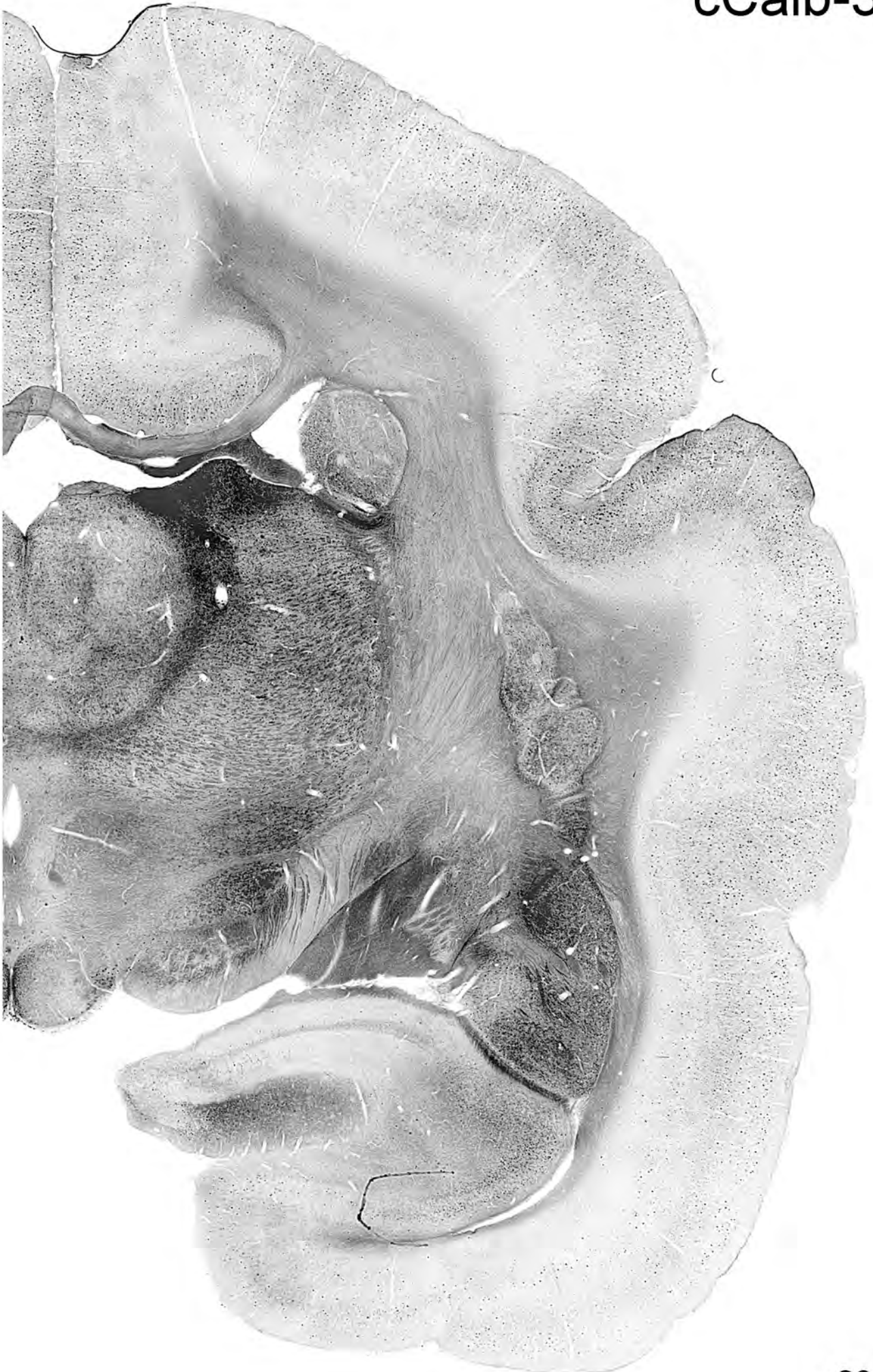
















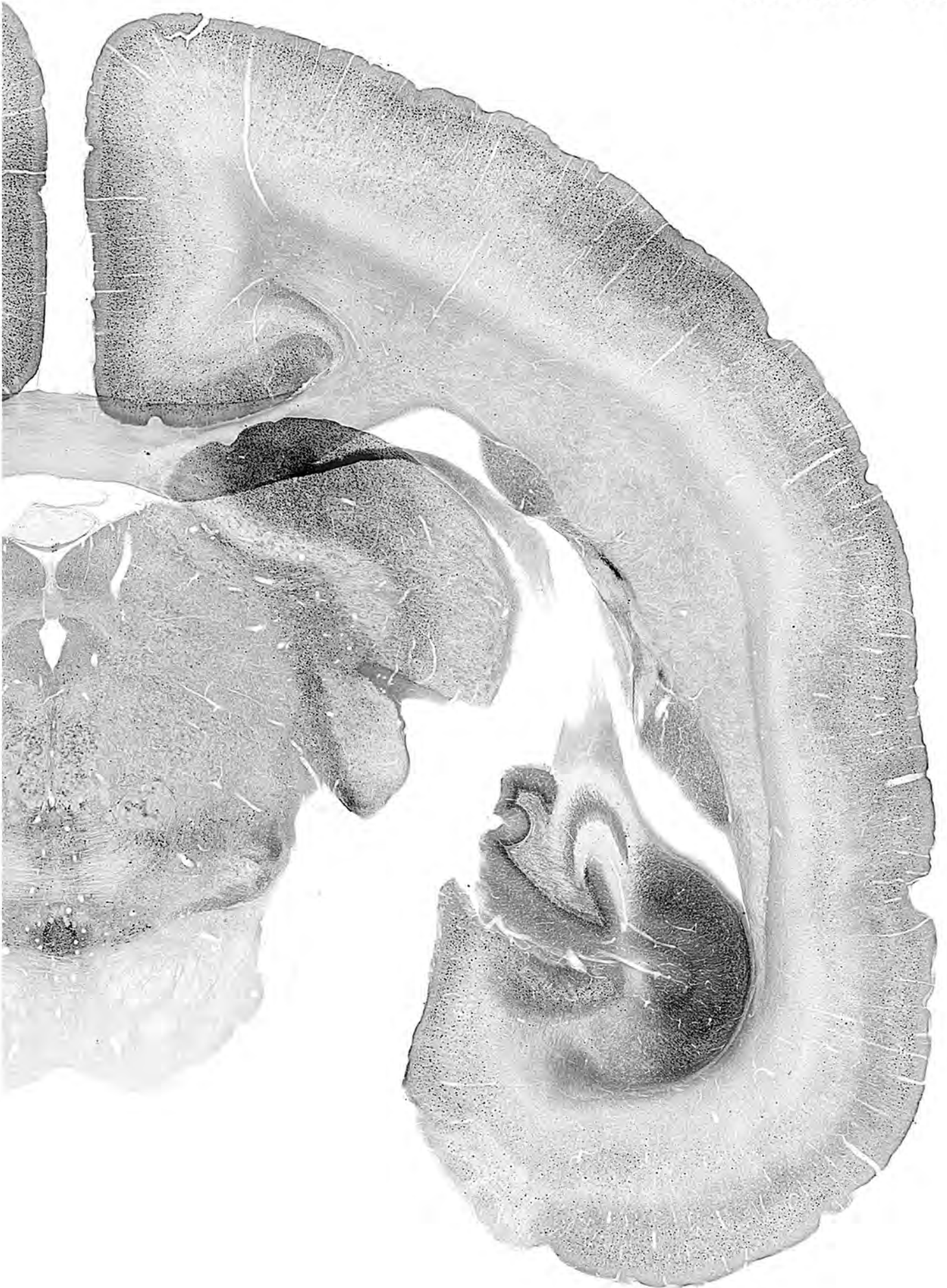




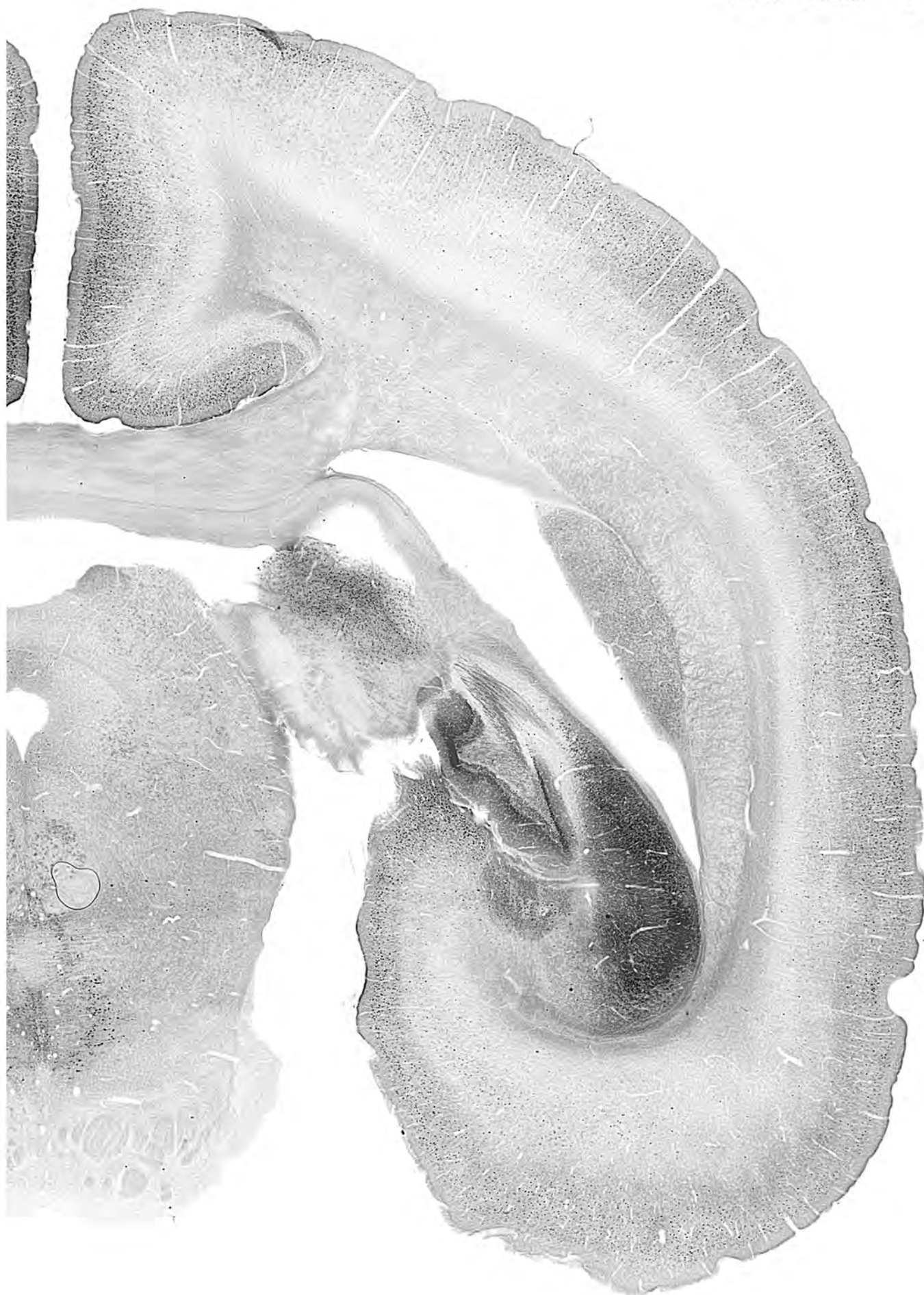












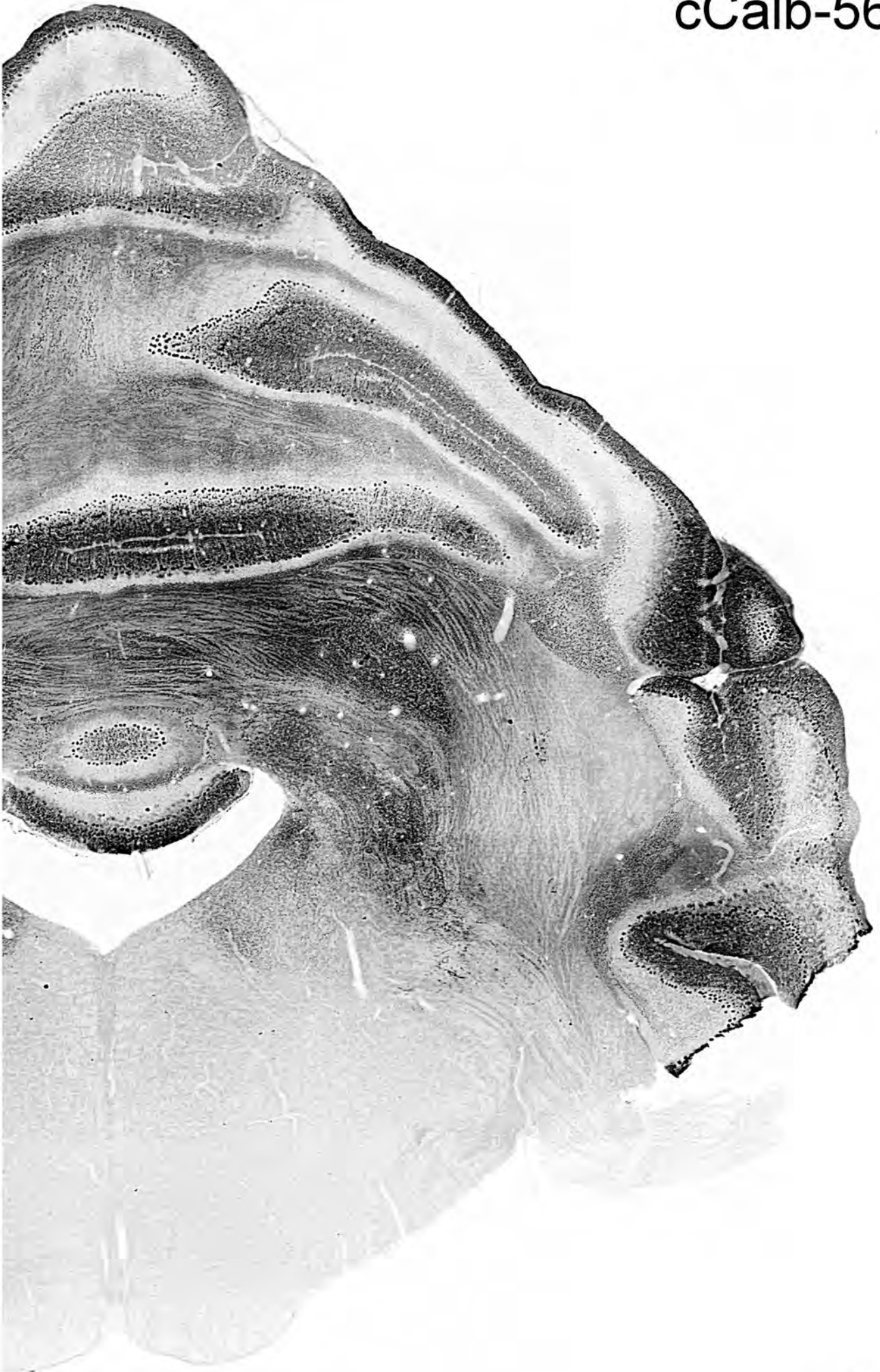


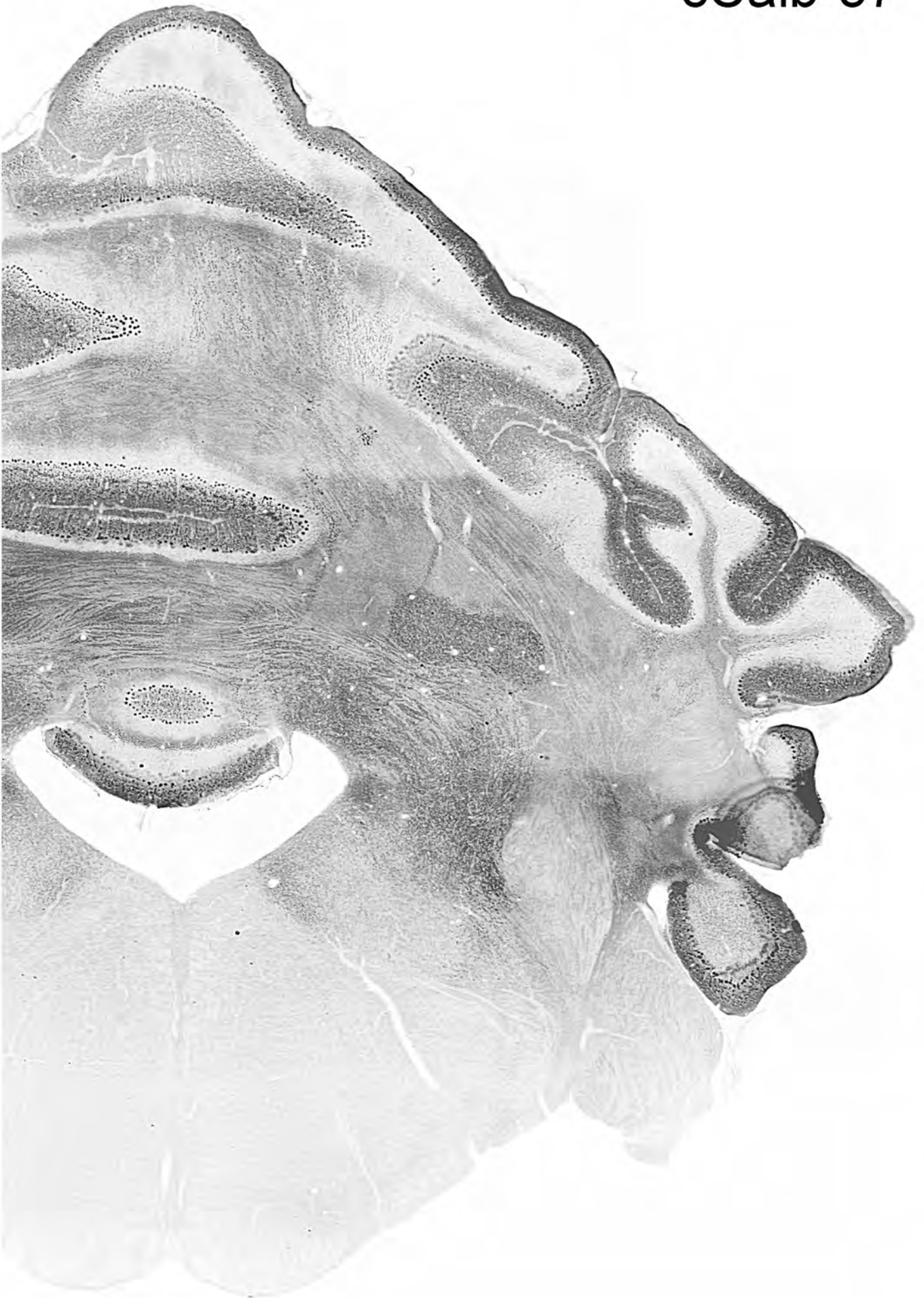




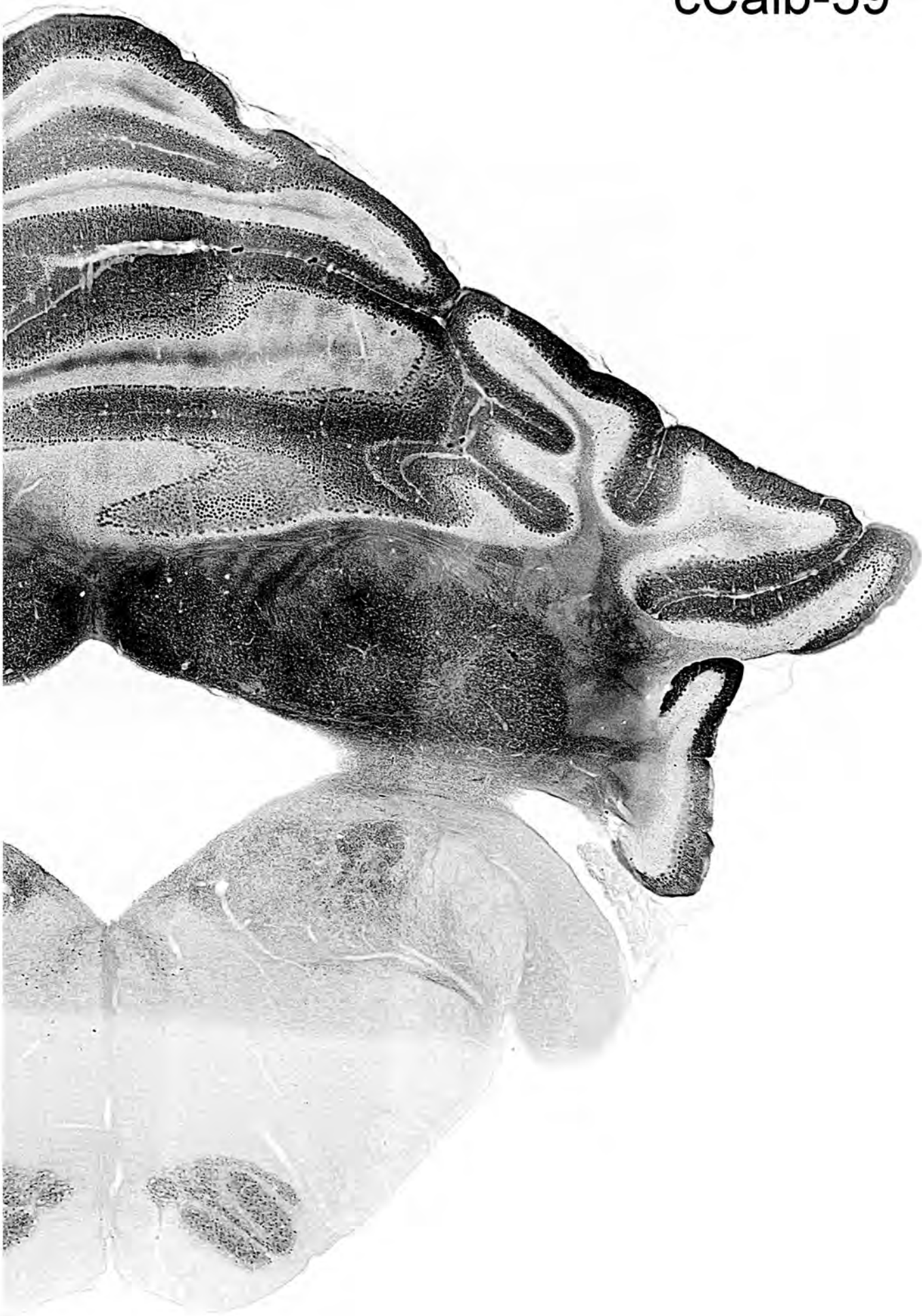




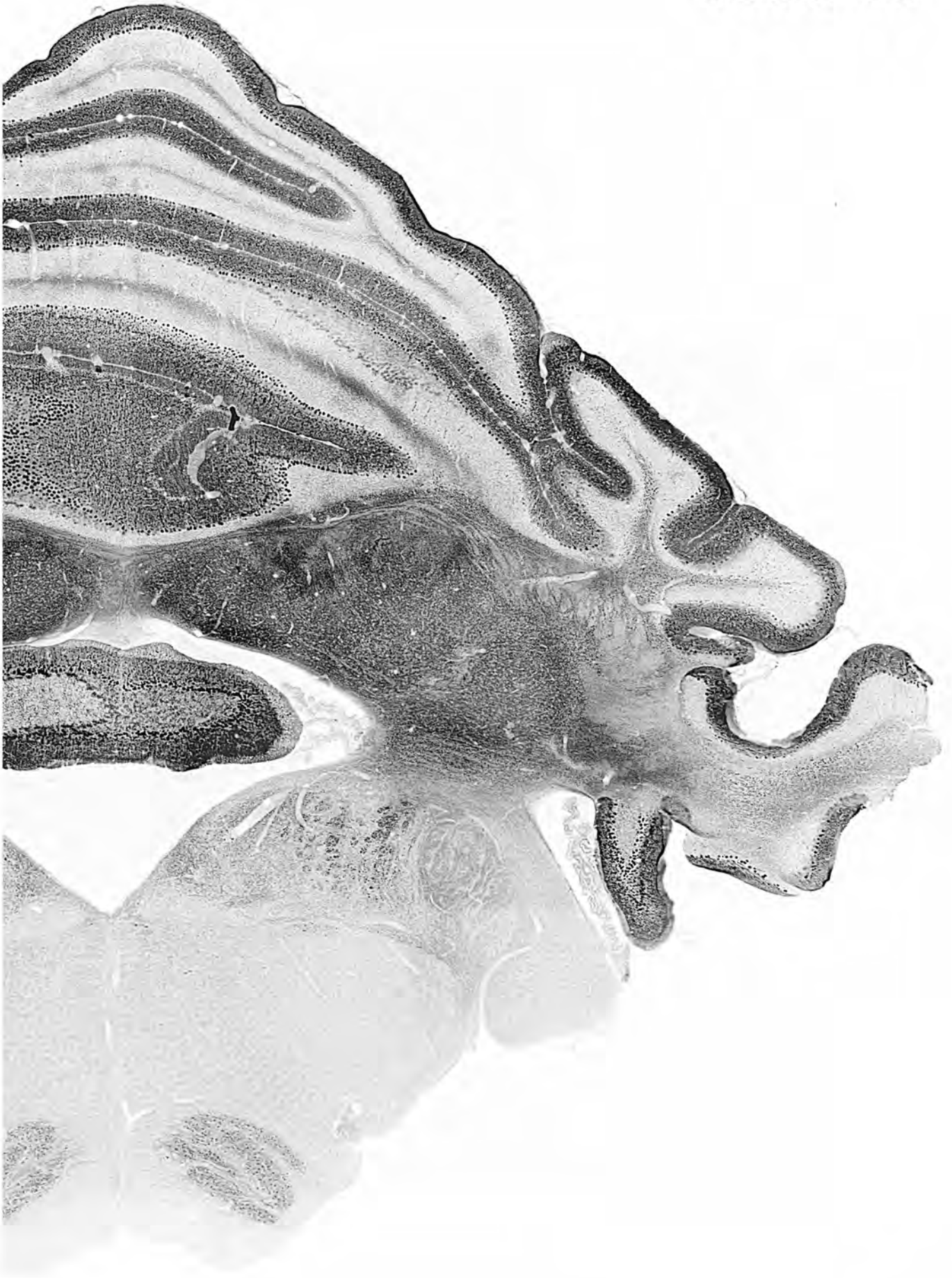


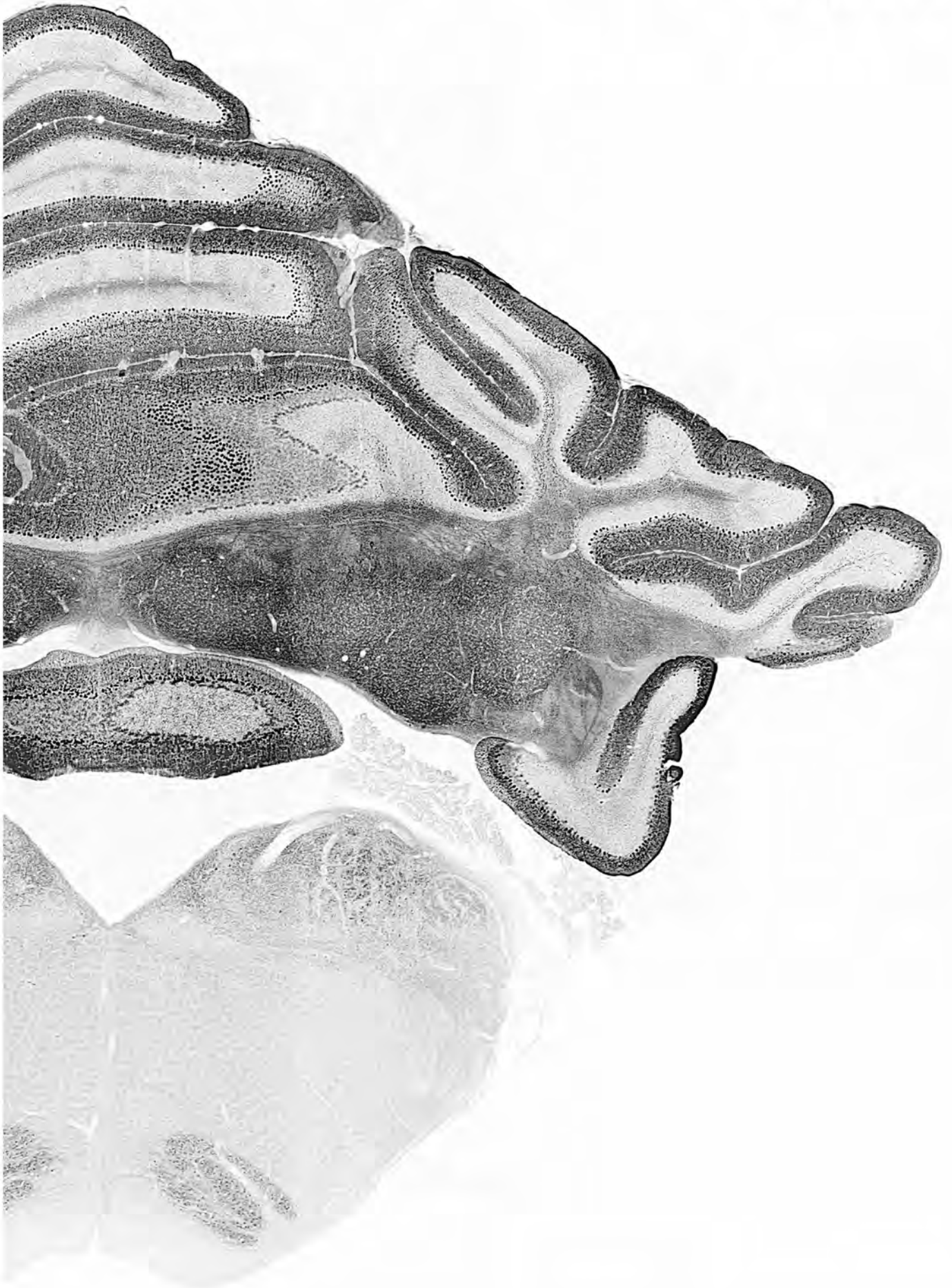






cCalb-60



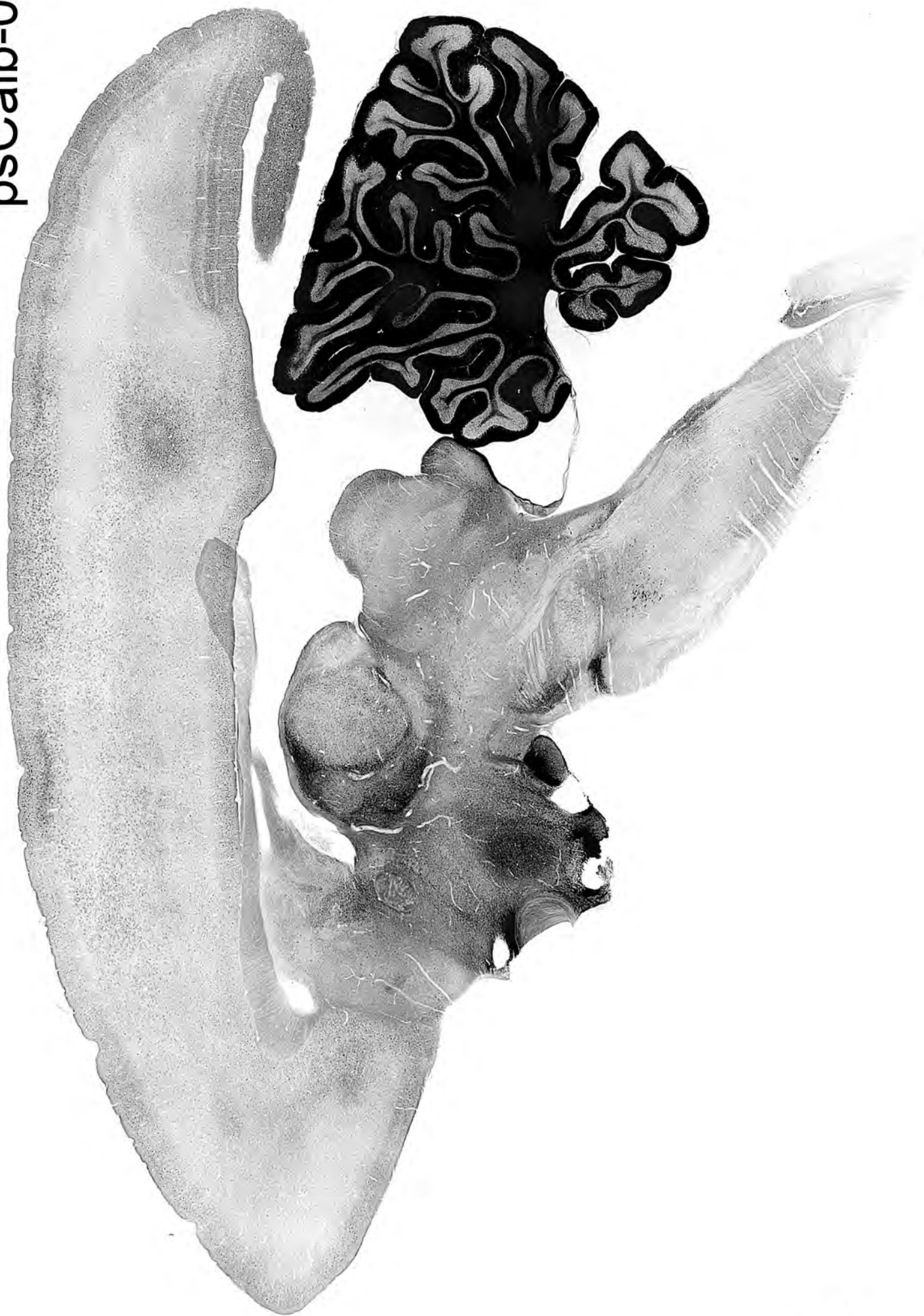






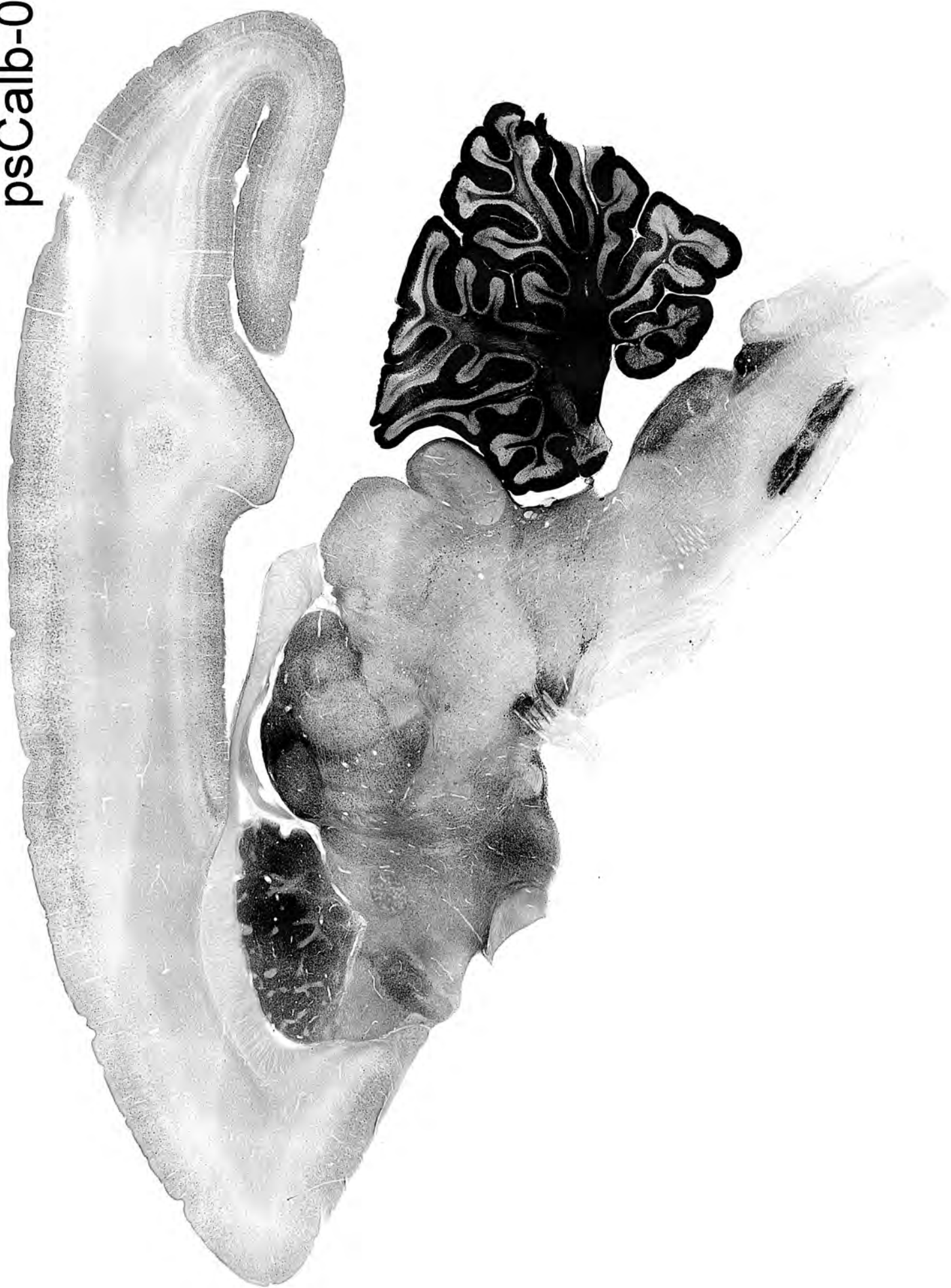








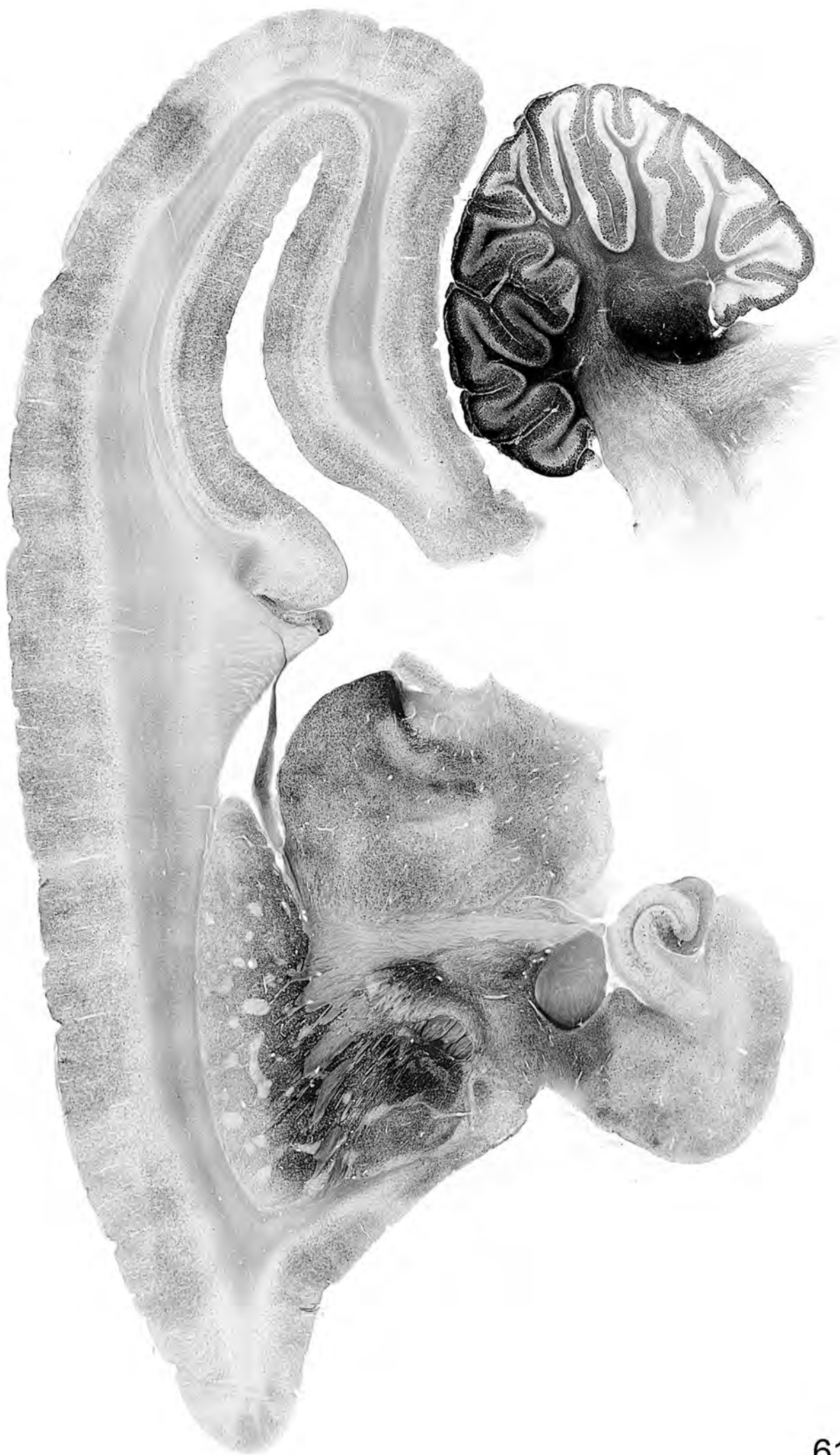








psCalb-07



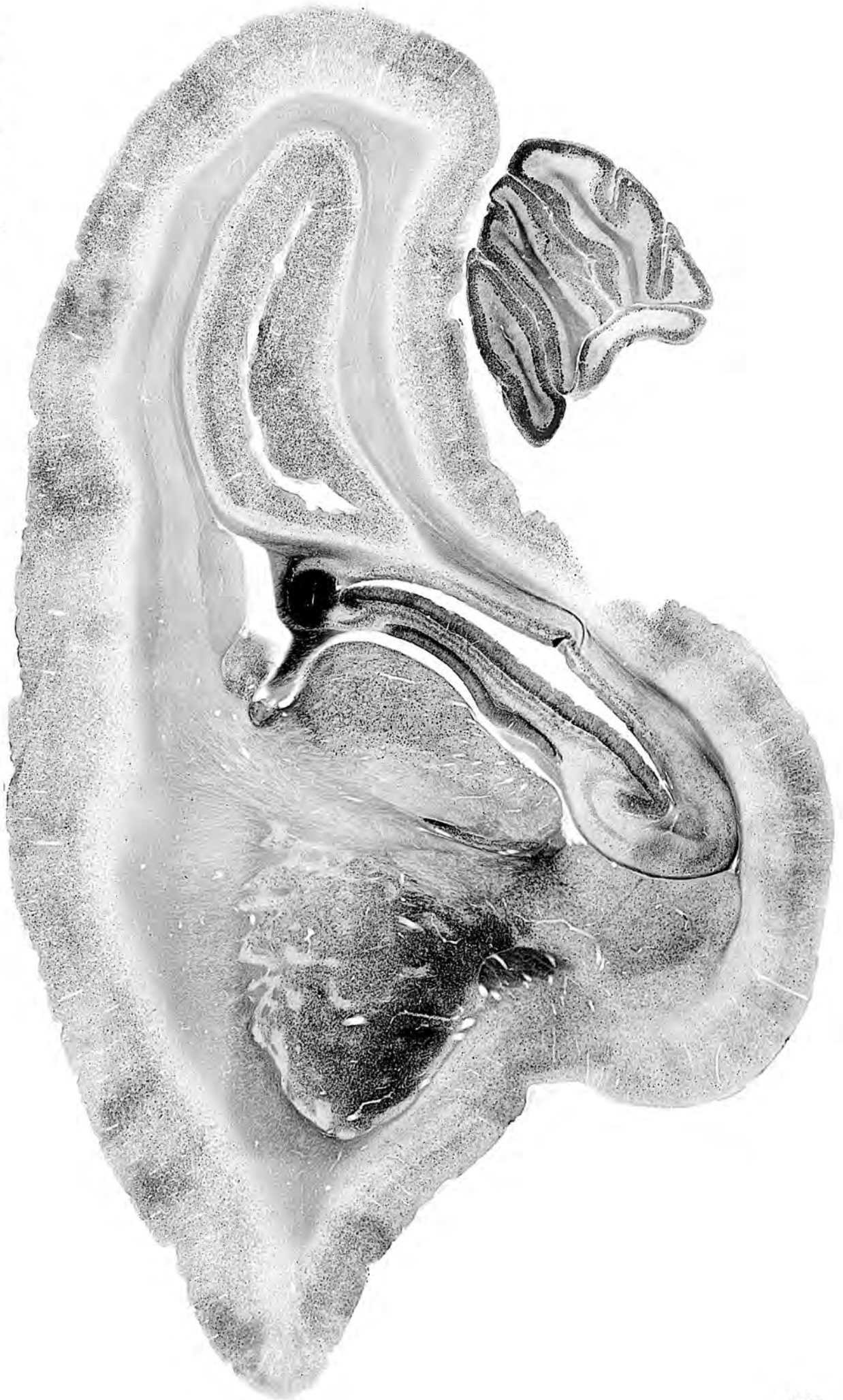


psCalb-09





psCalb-11





psCalb-13

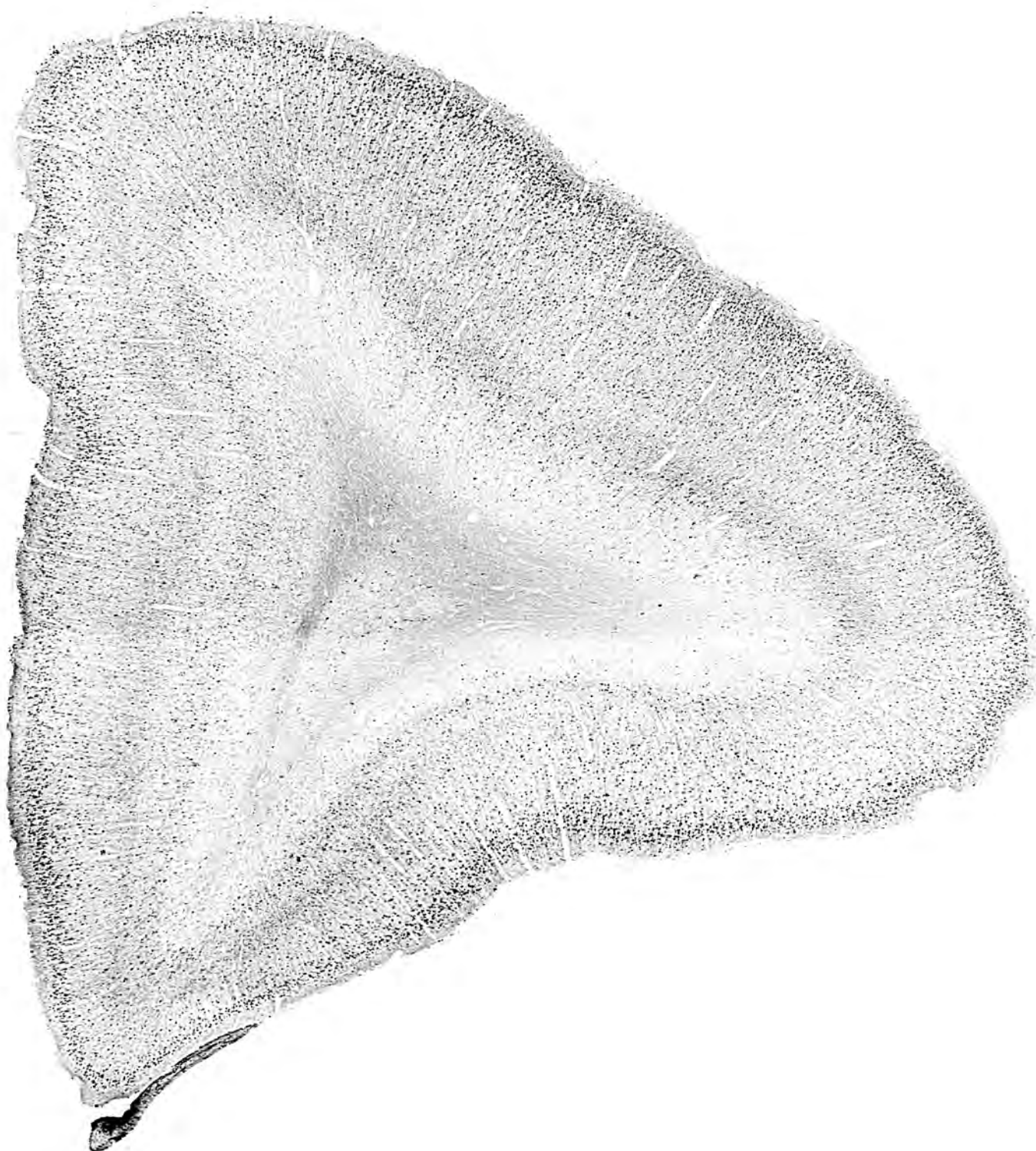


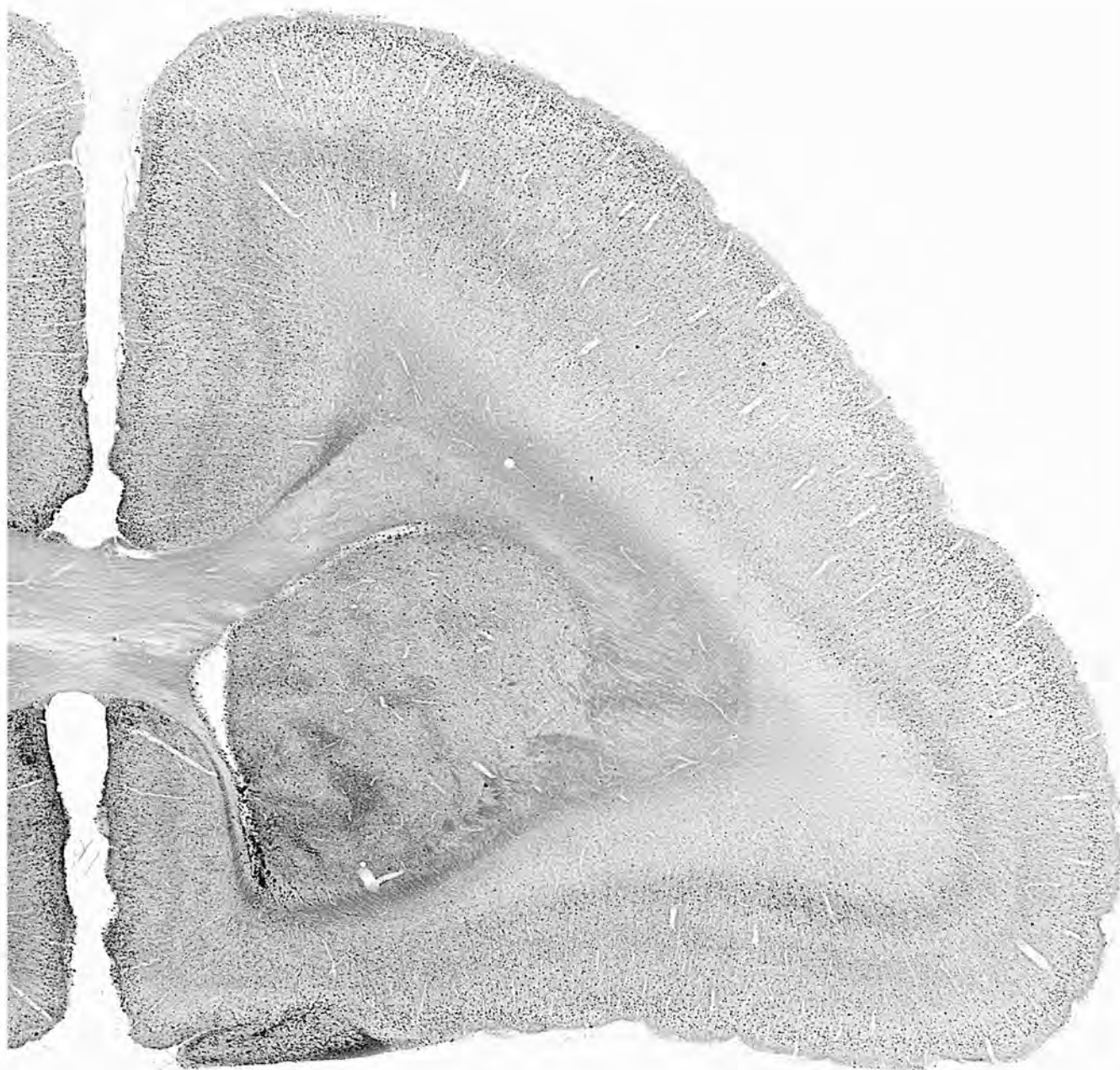
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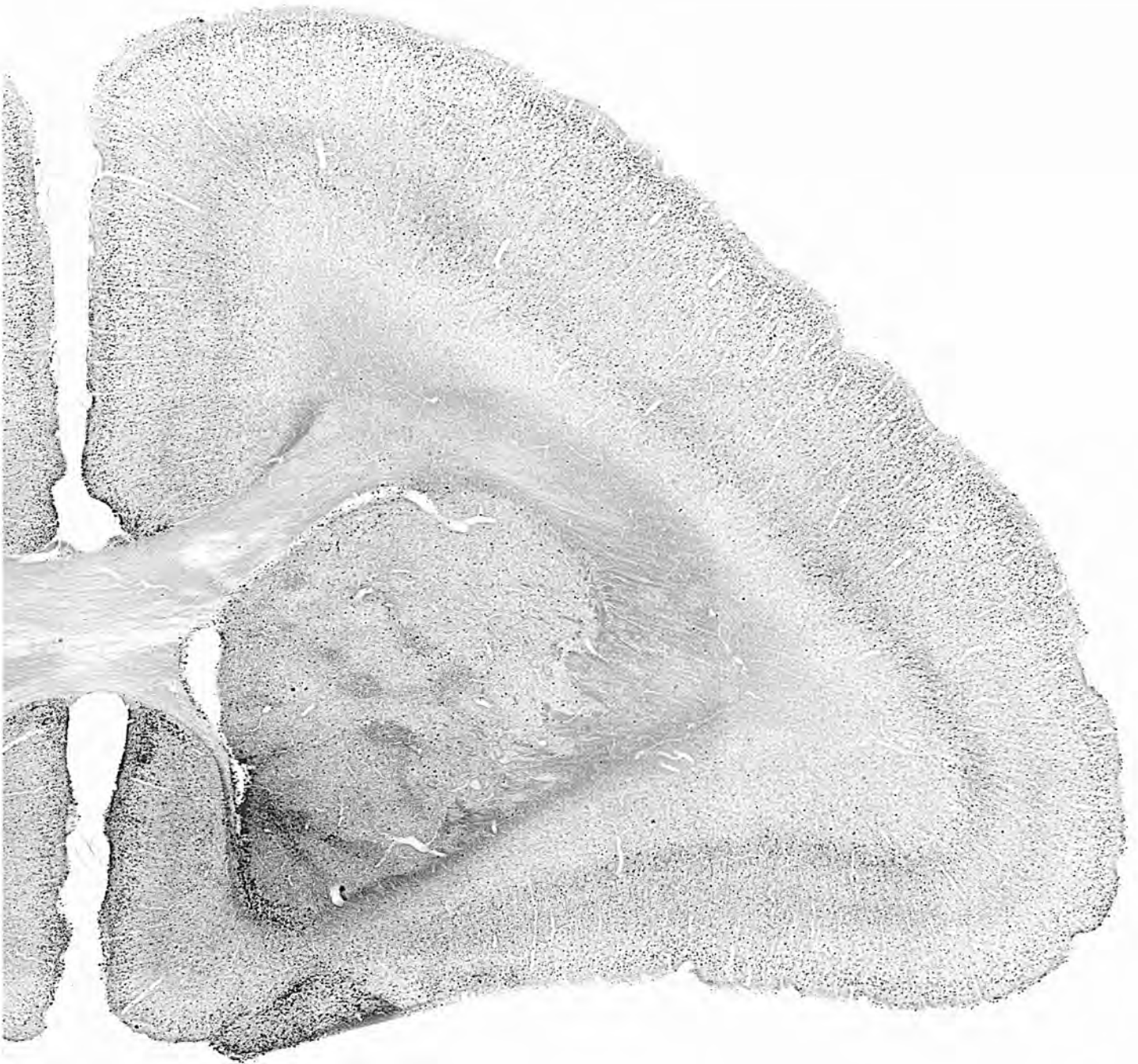


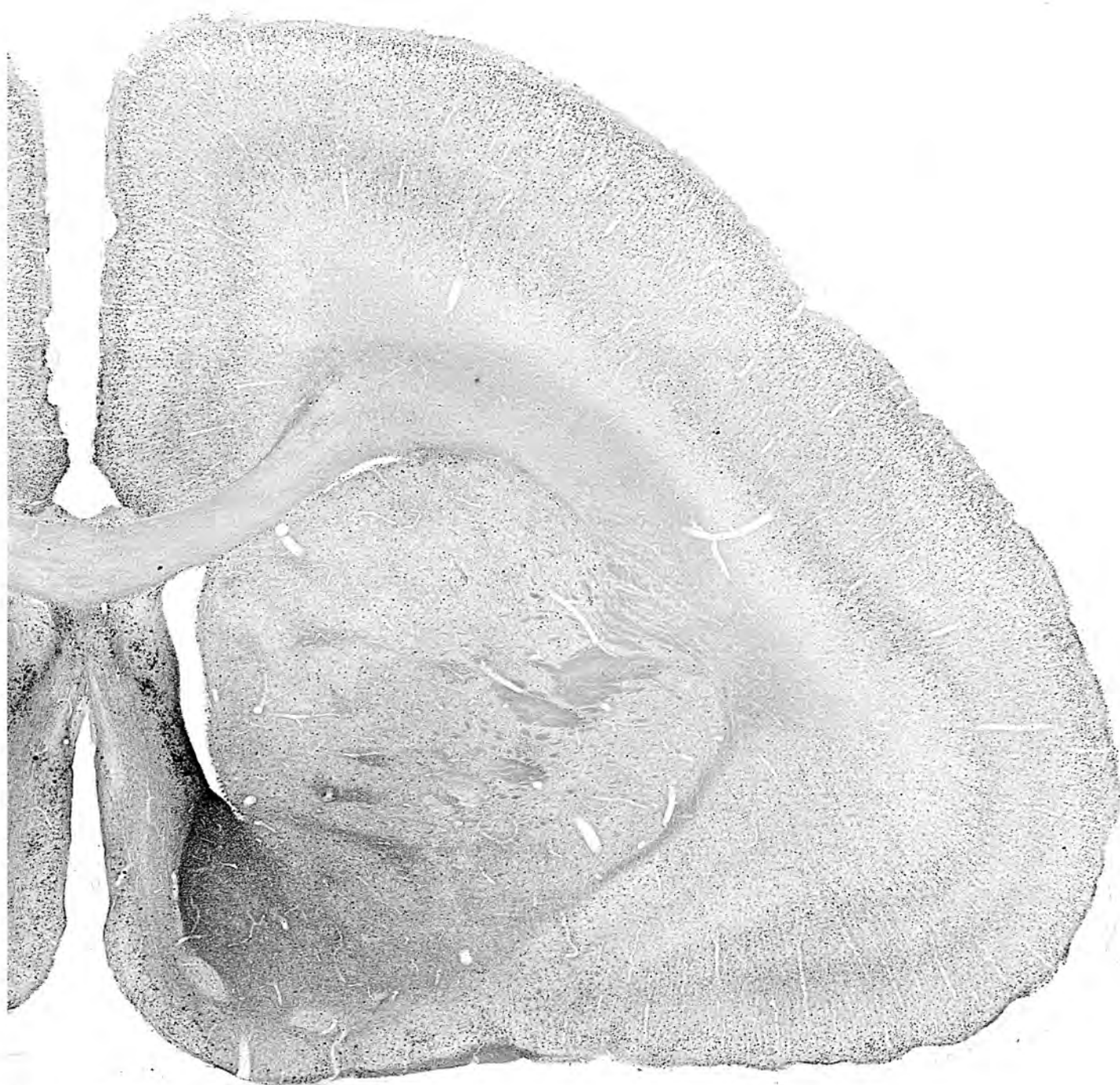
3.2 Plates—calretinin immunohistochemistry

cCR-06







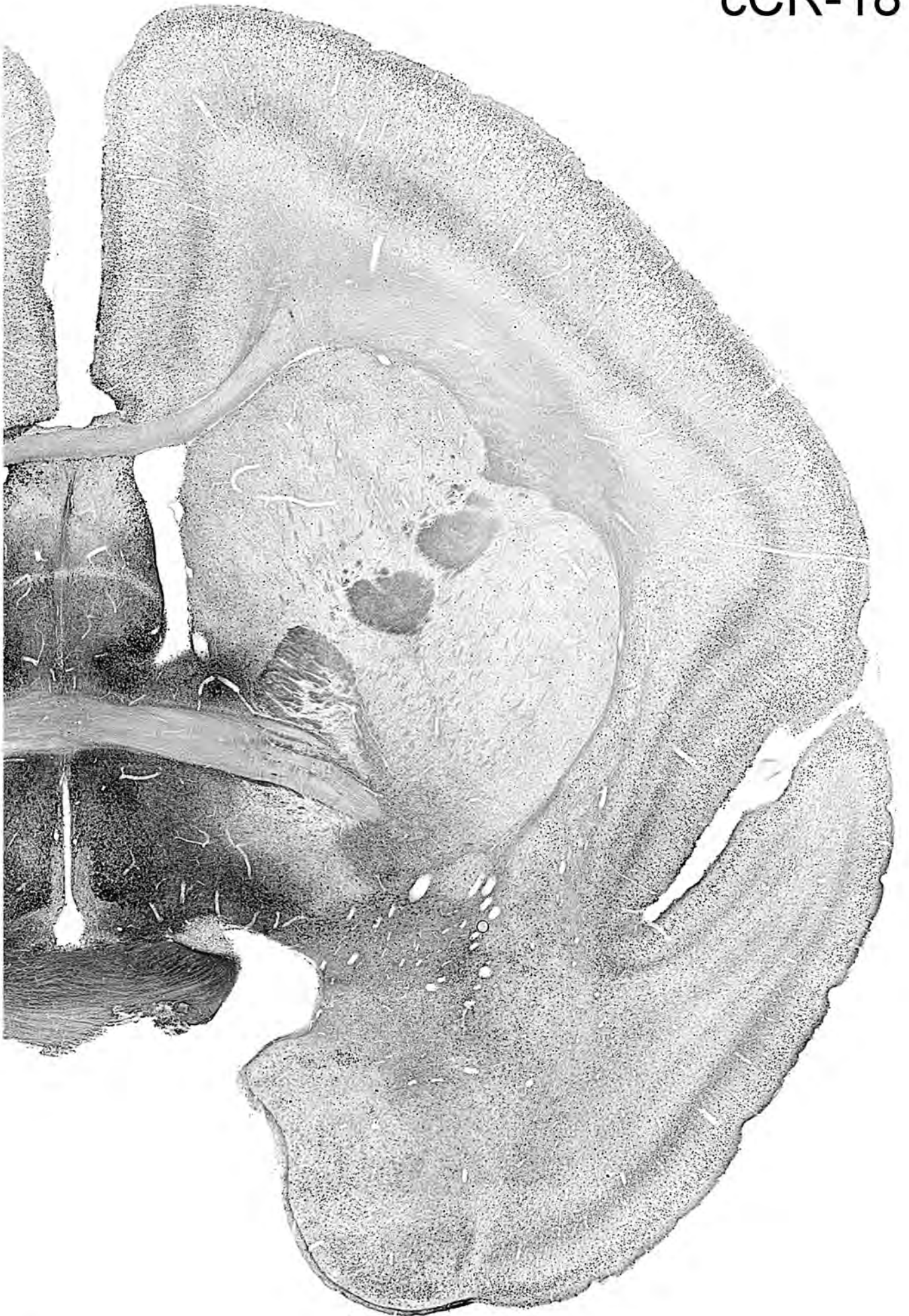






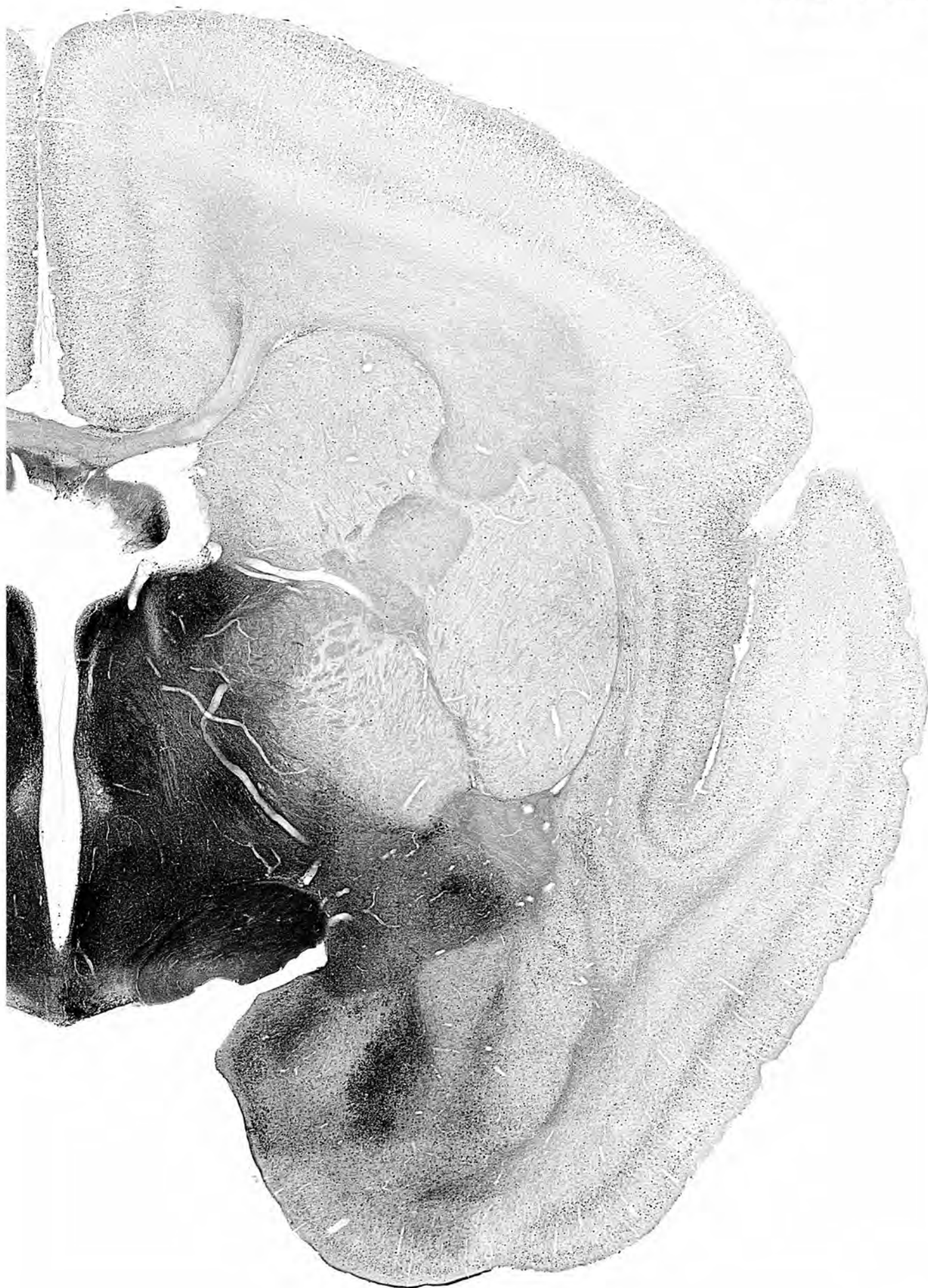








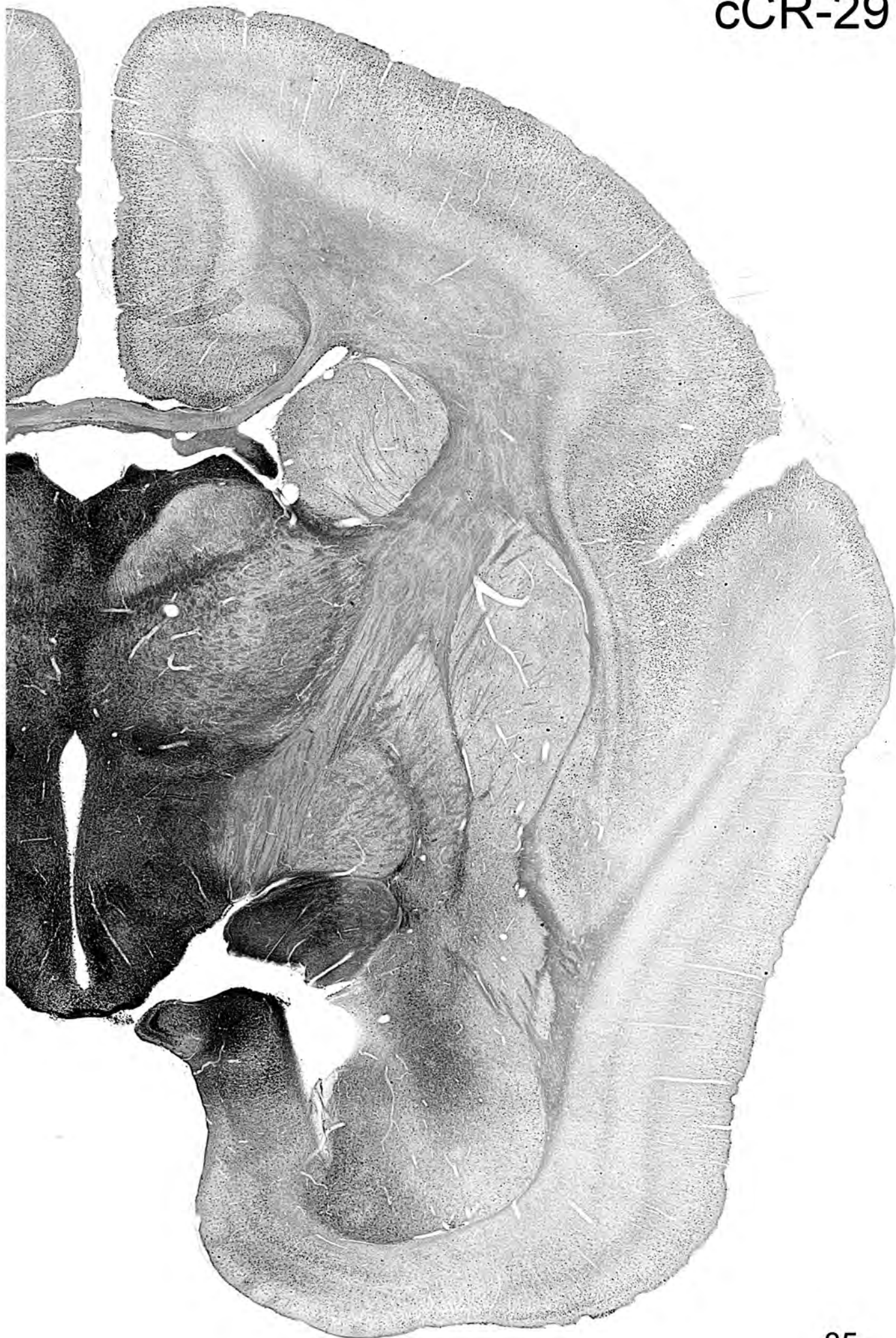






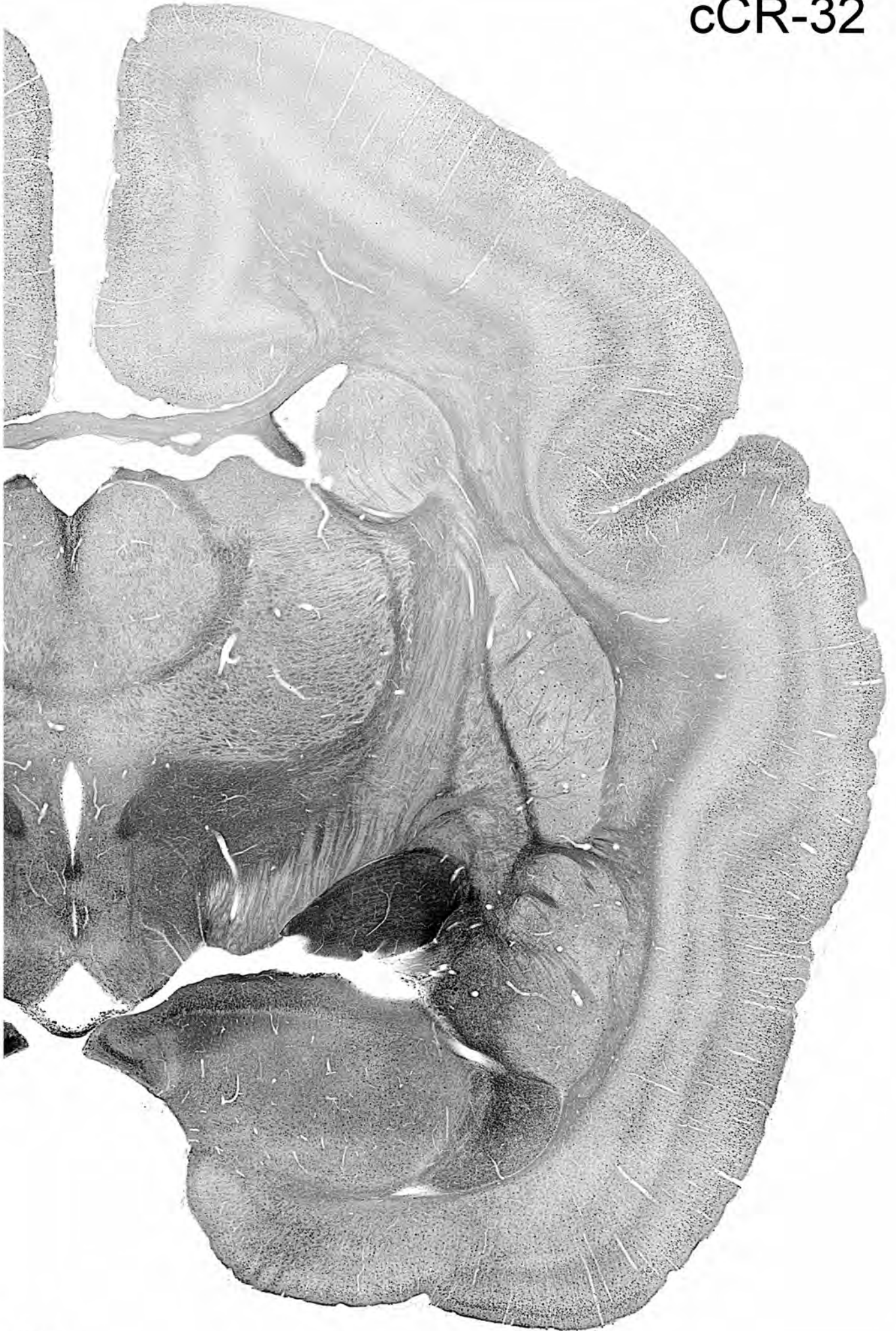






























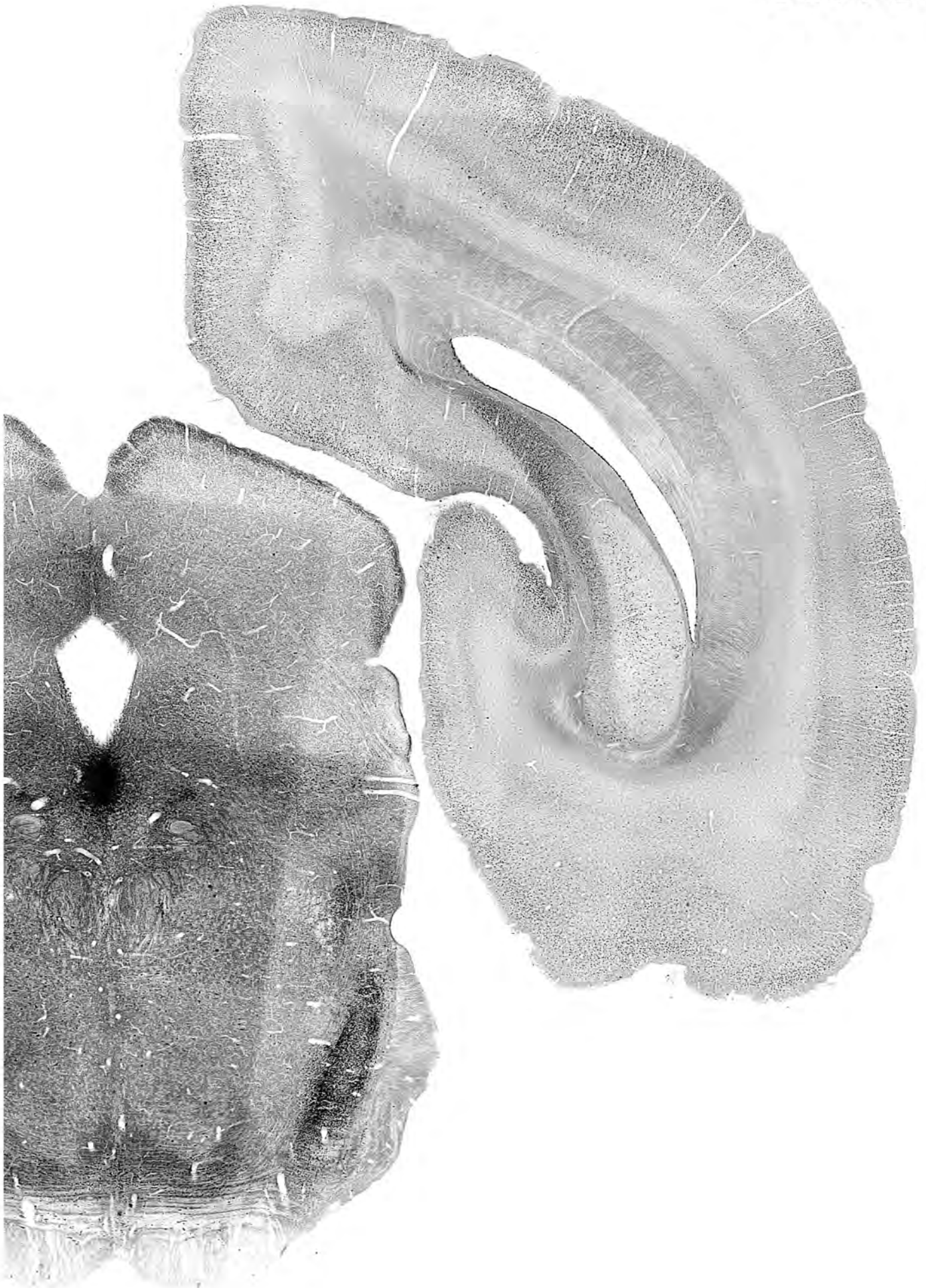






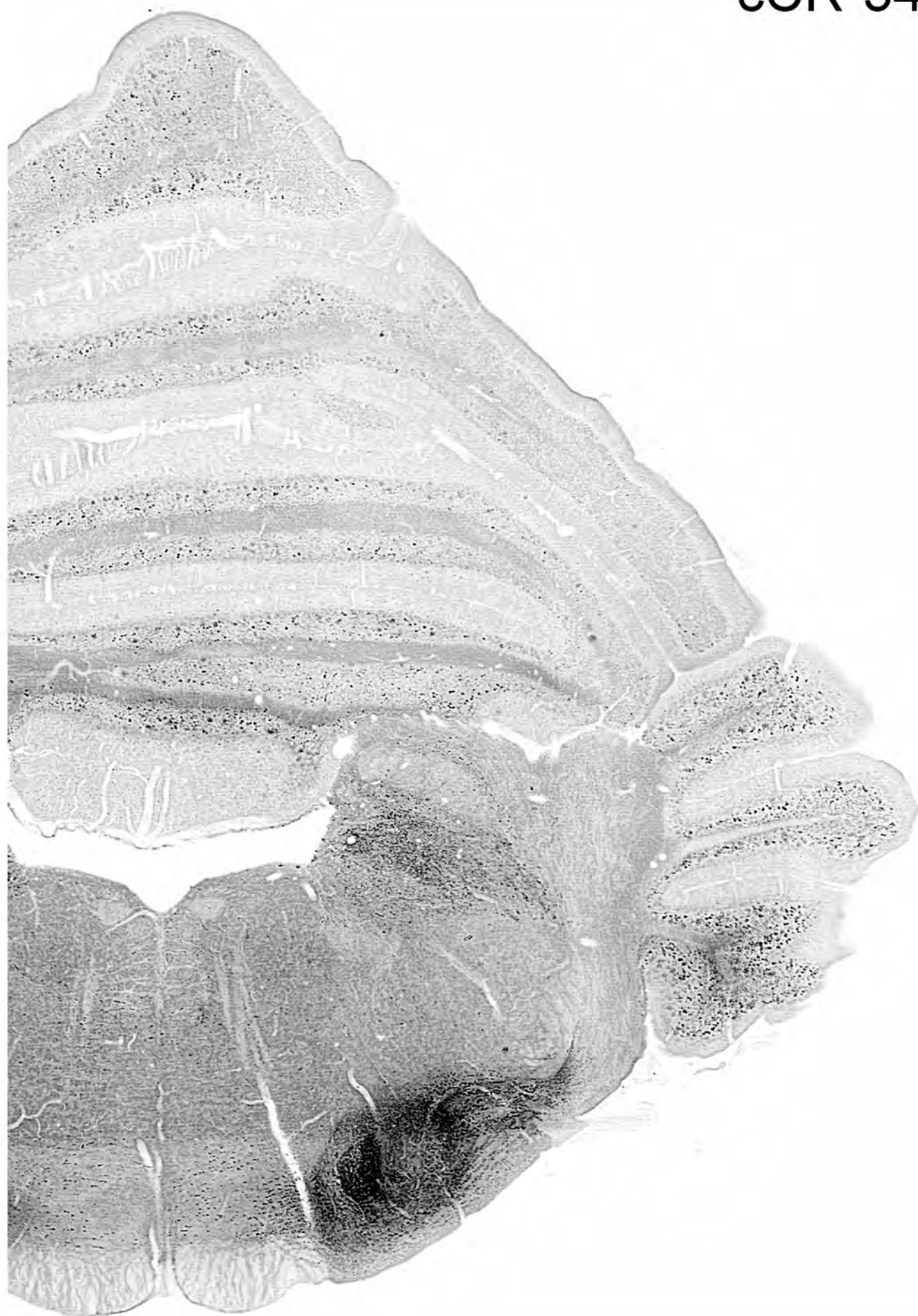






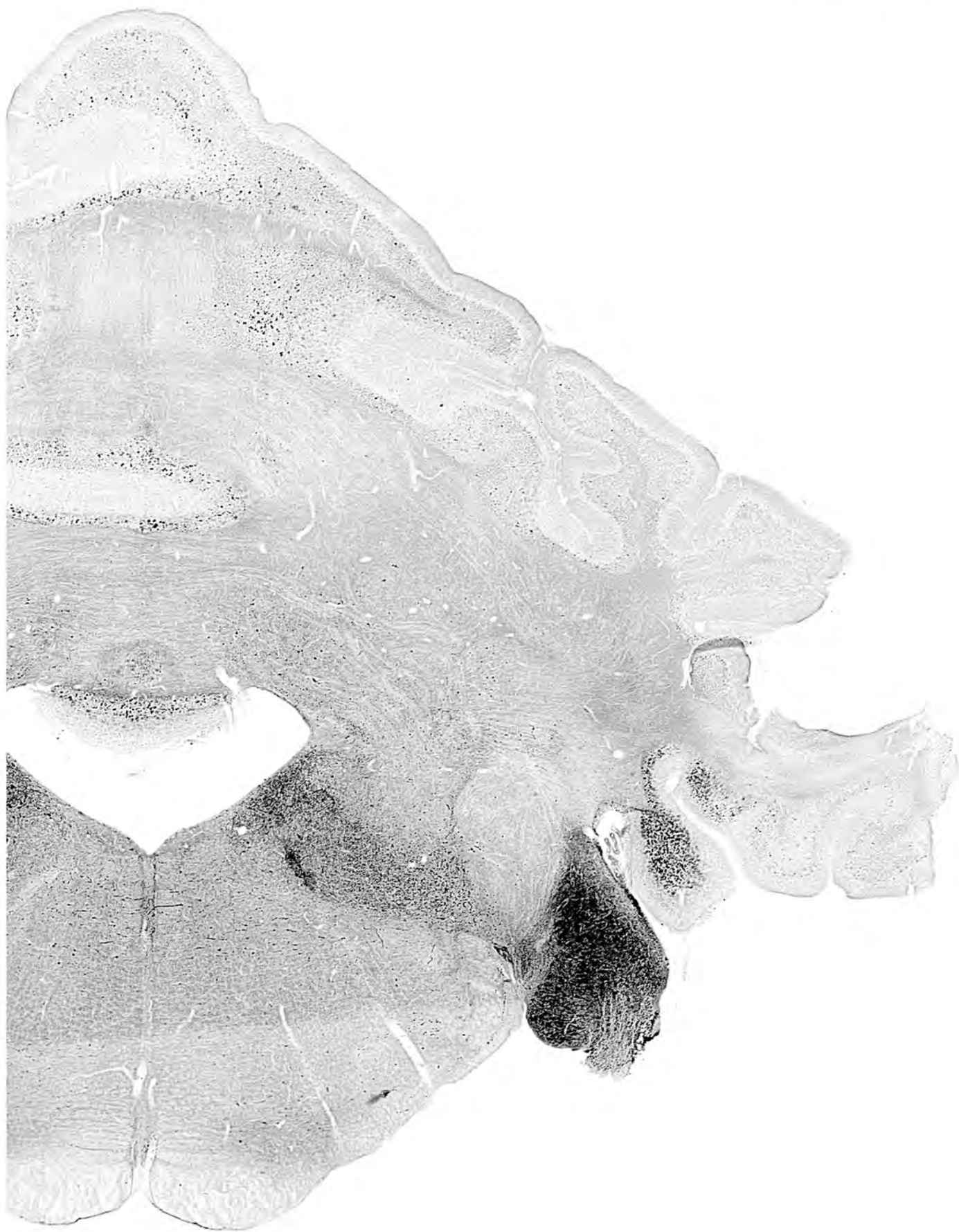


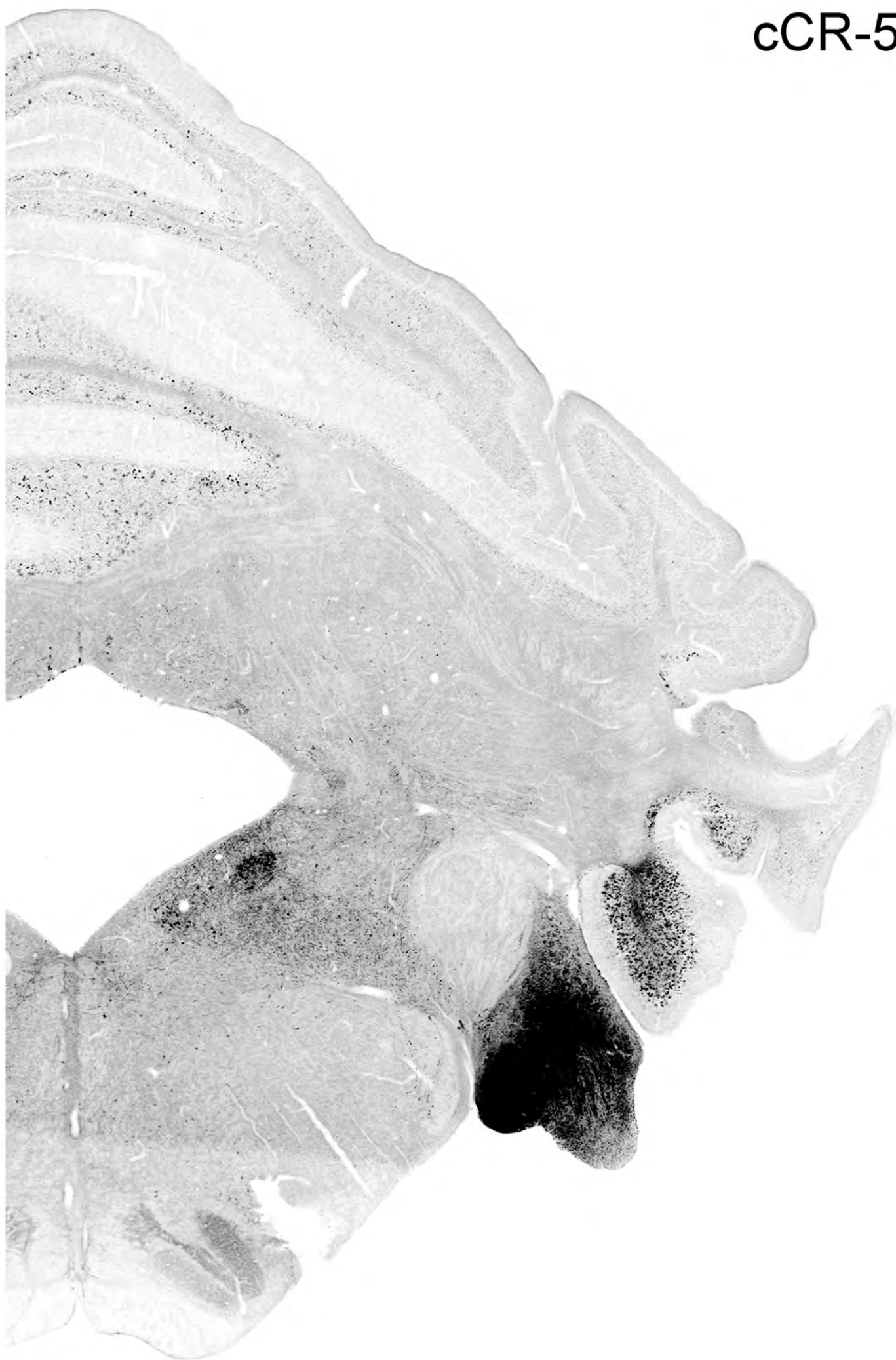


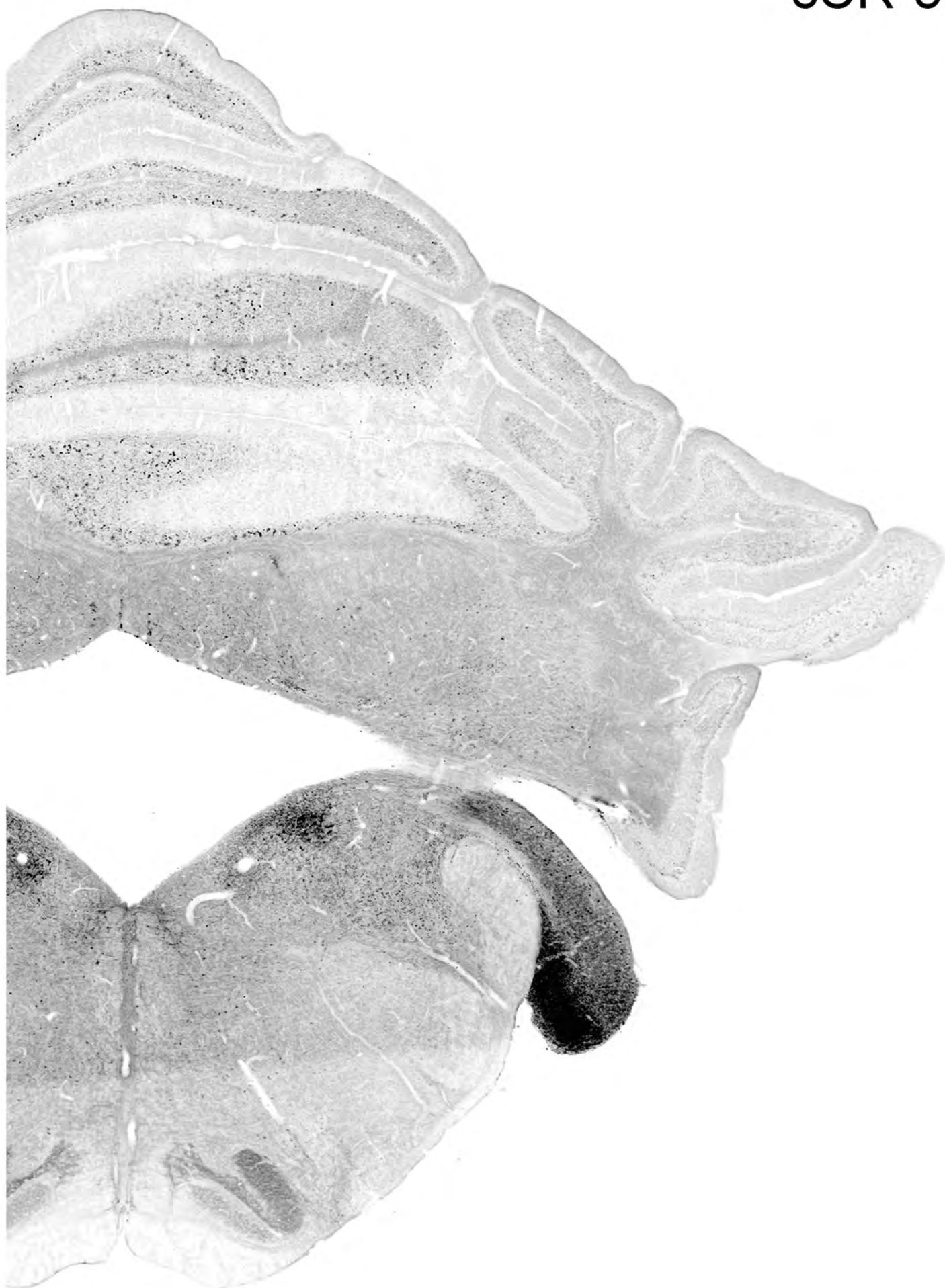




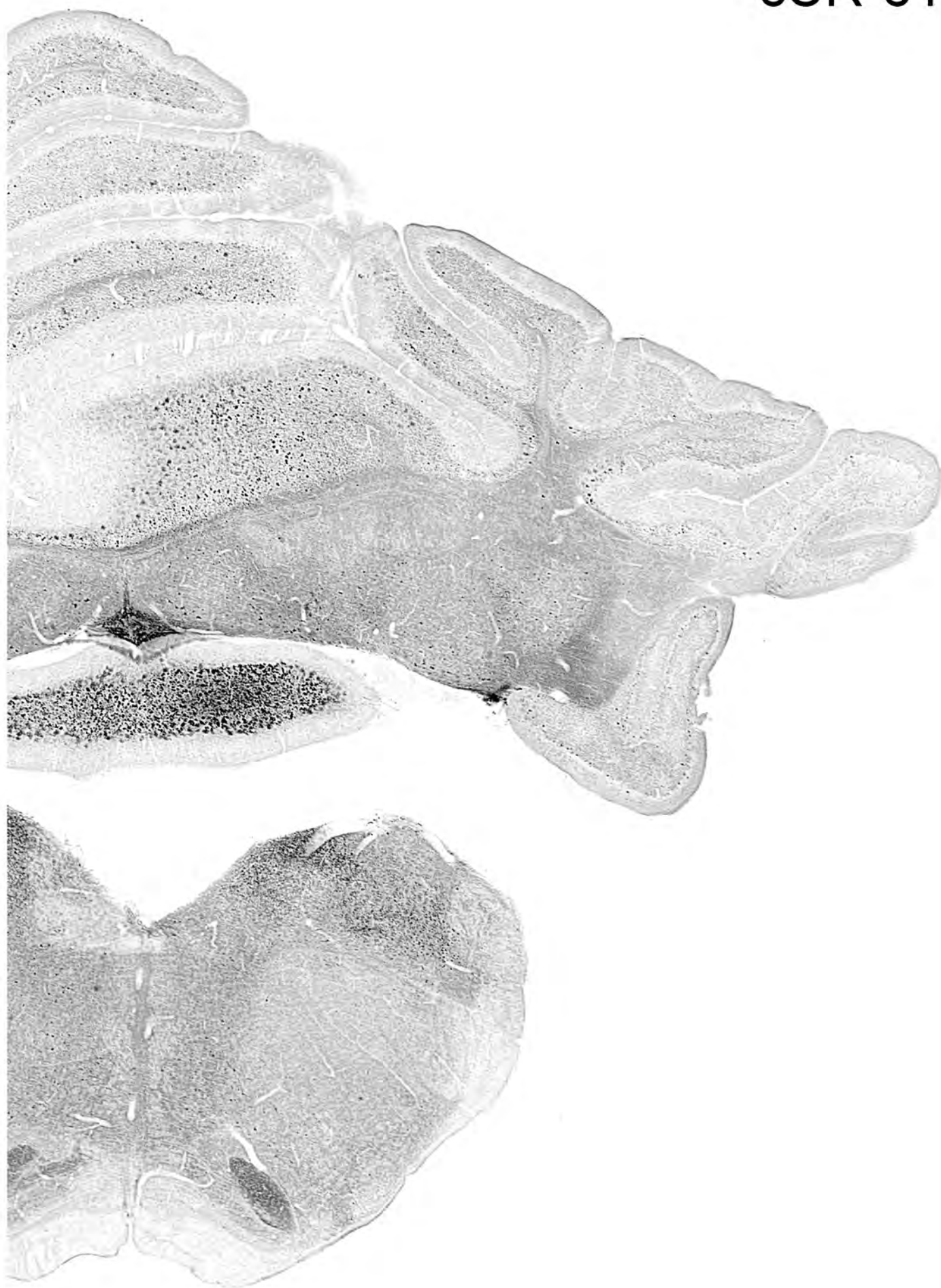


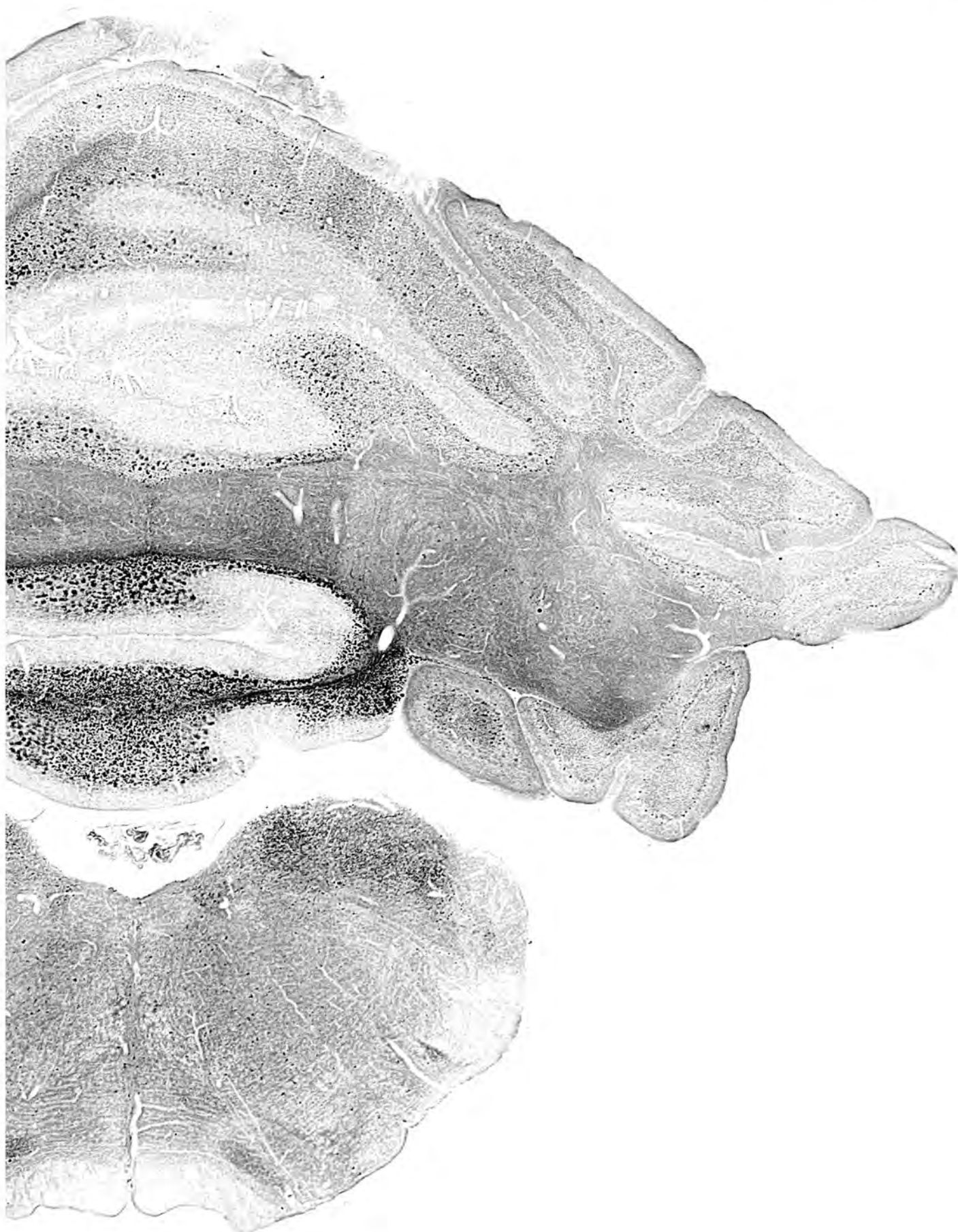










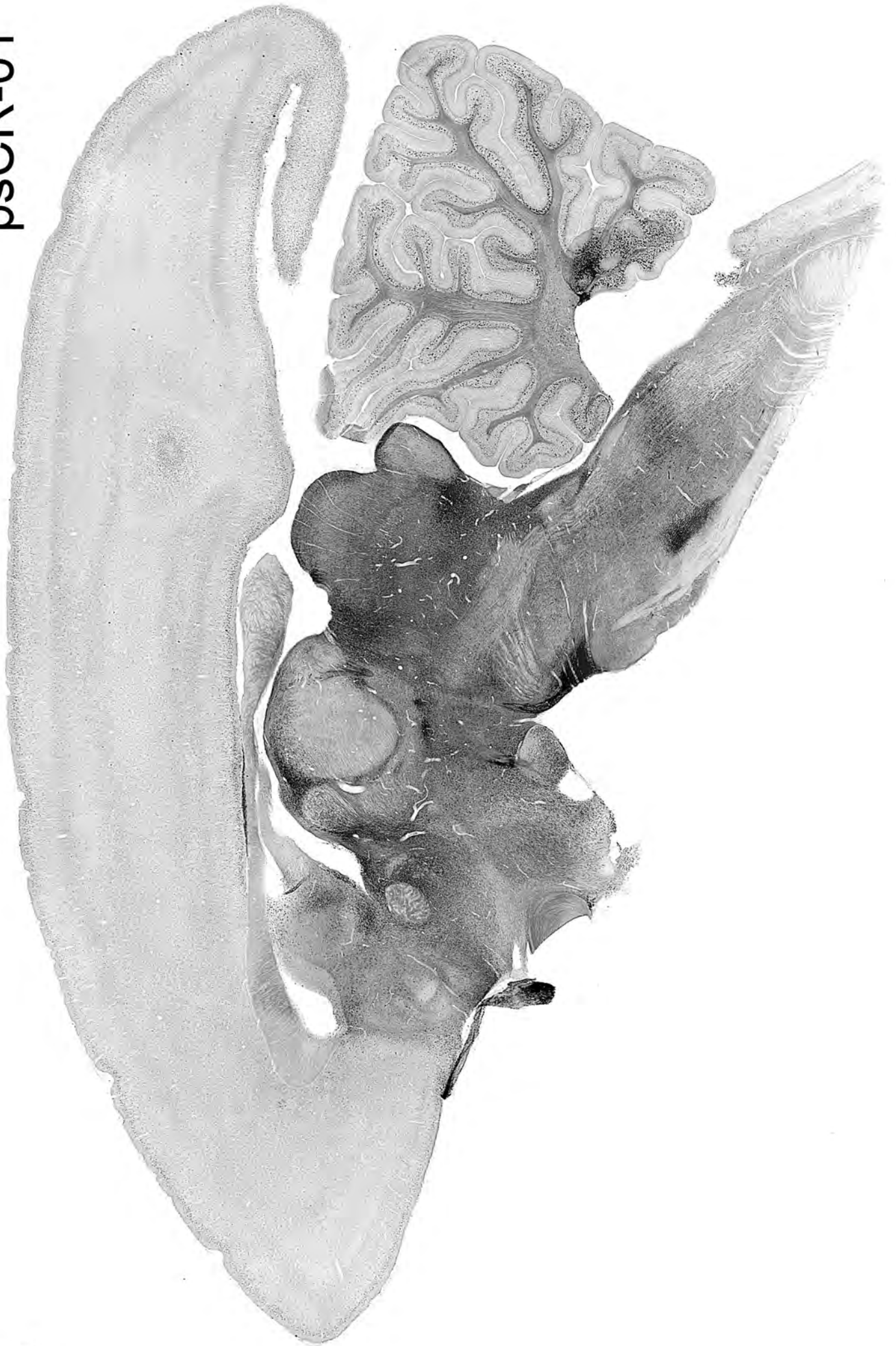








psCR-01



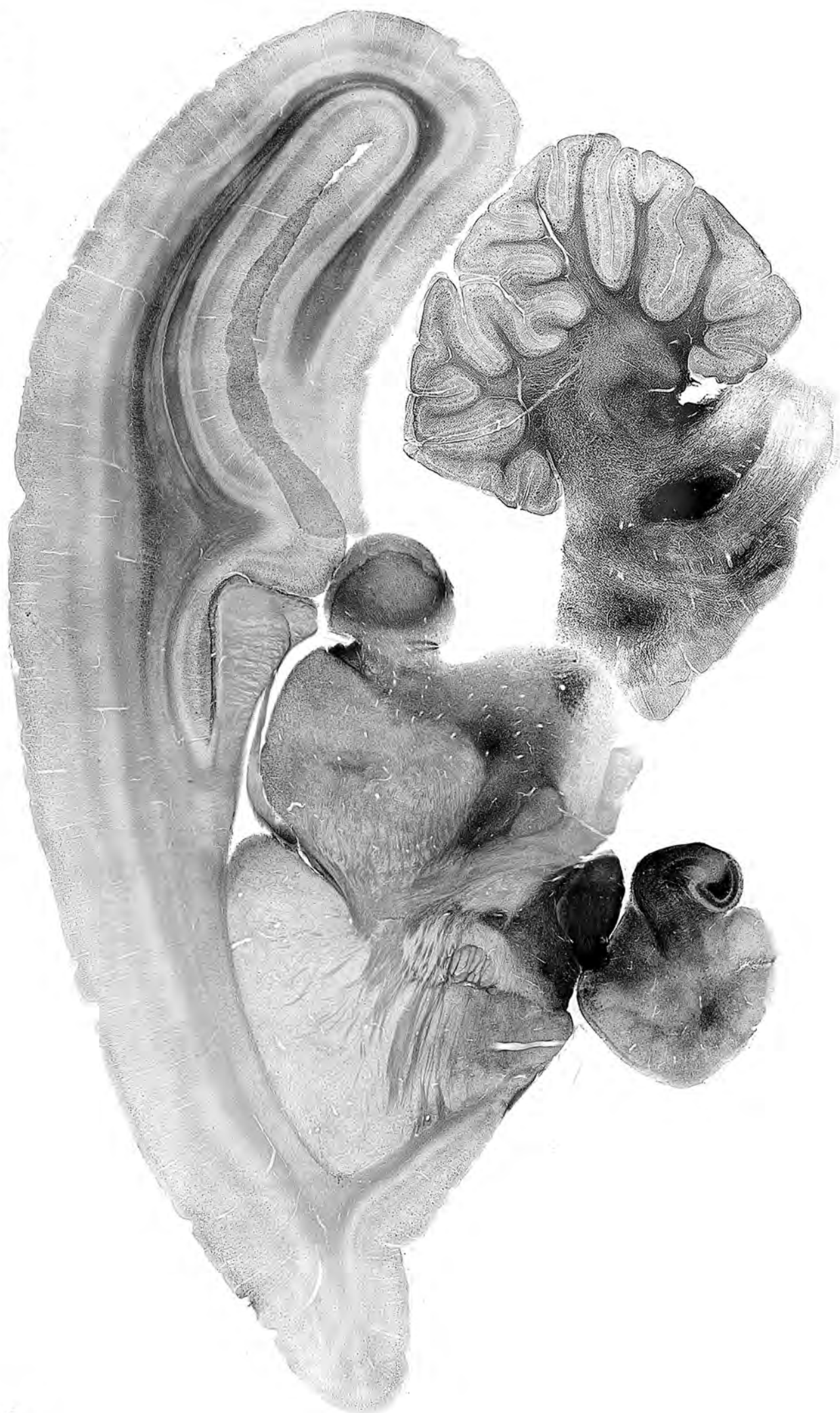
psCR-02





psCR-05

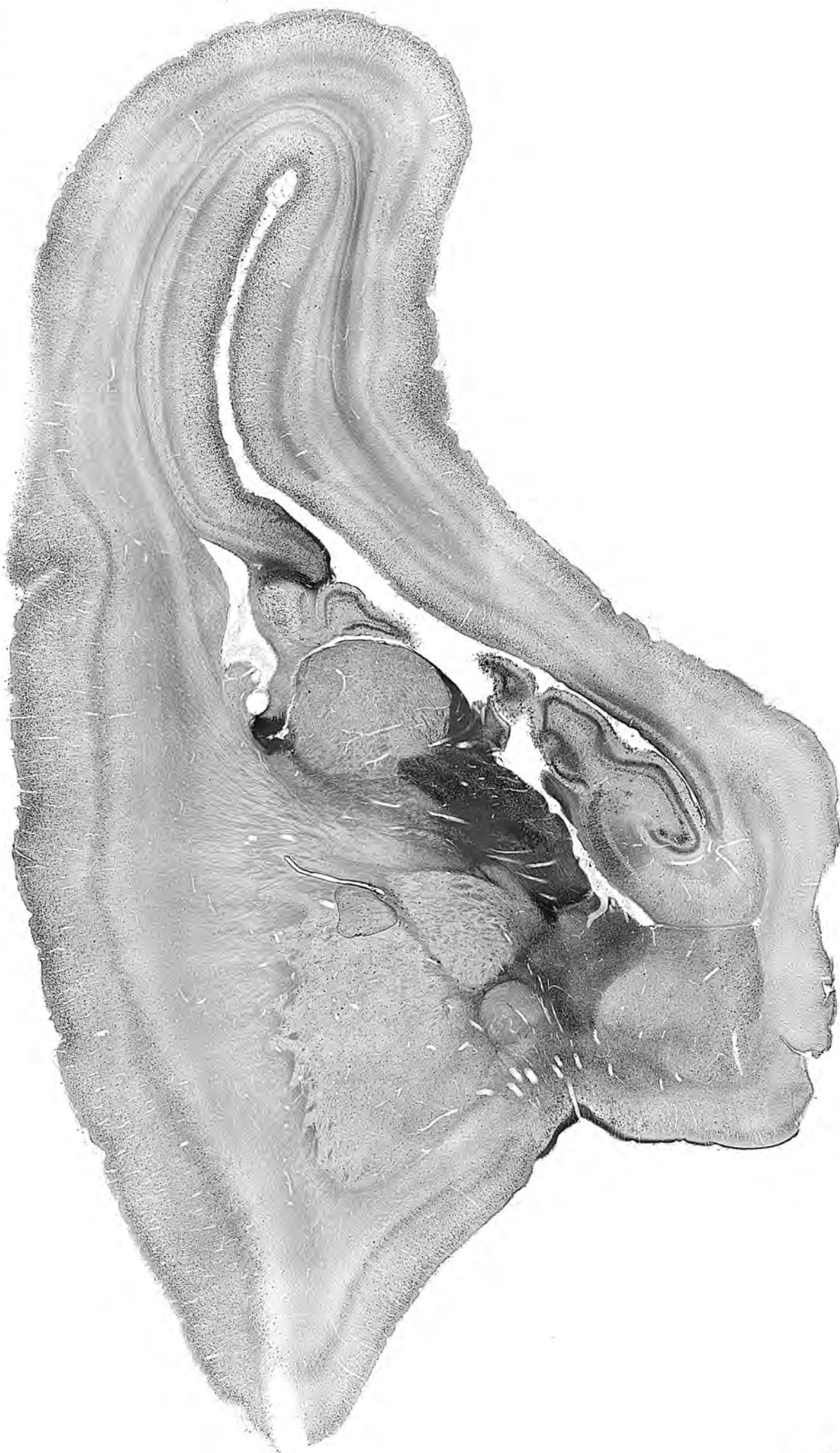








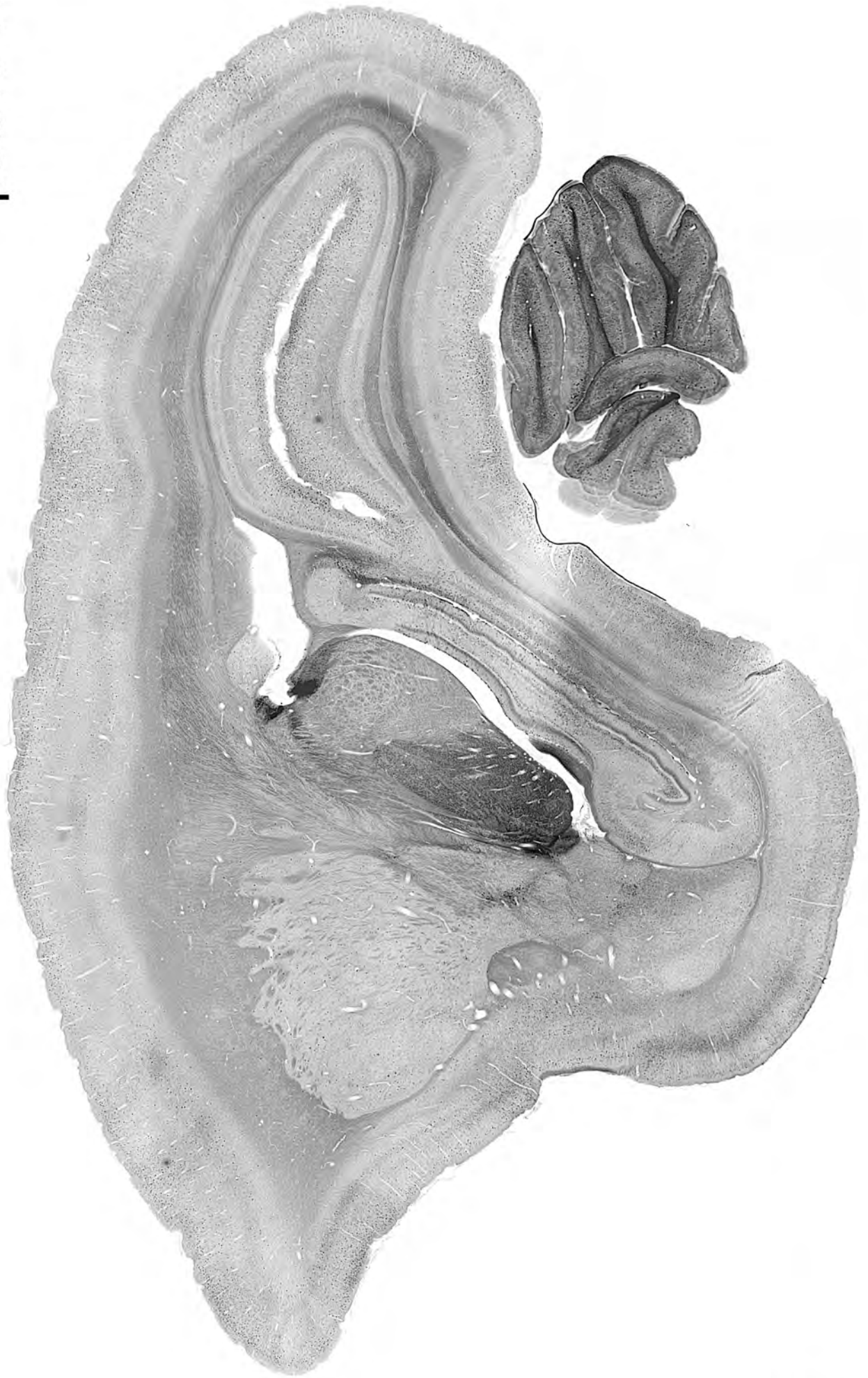
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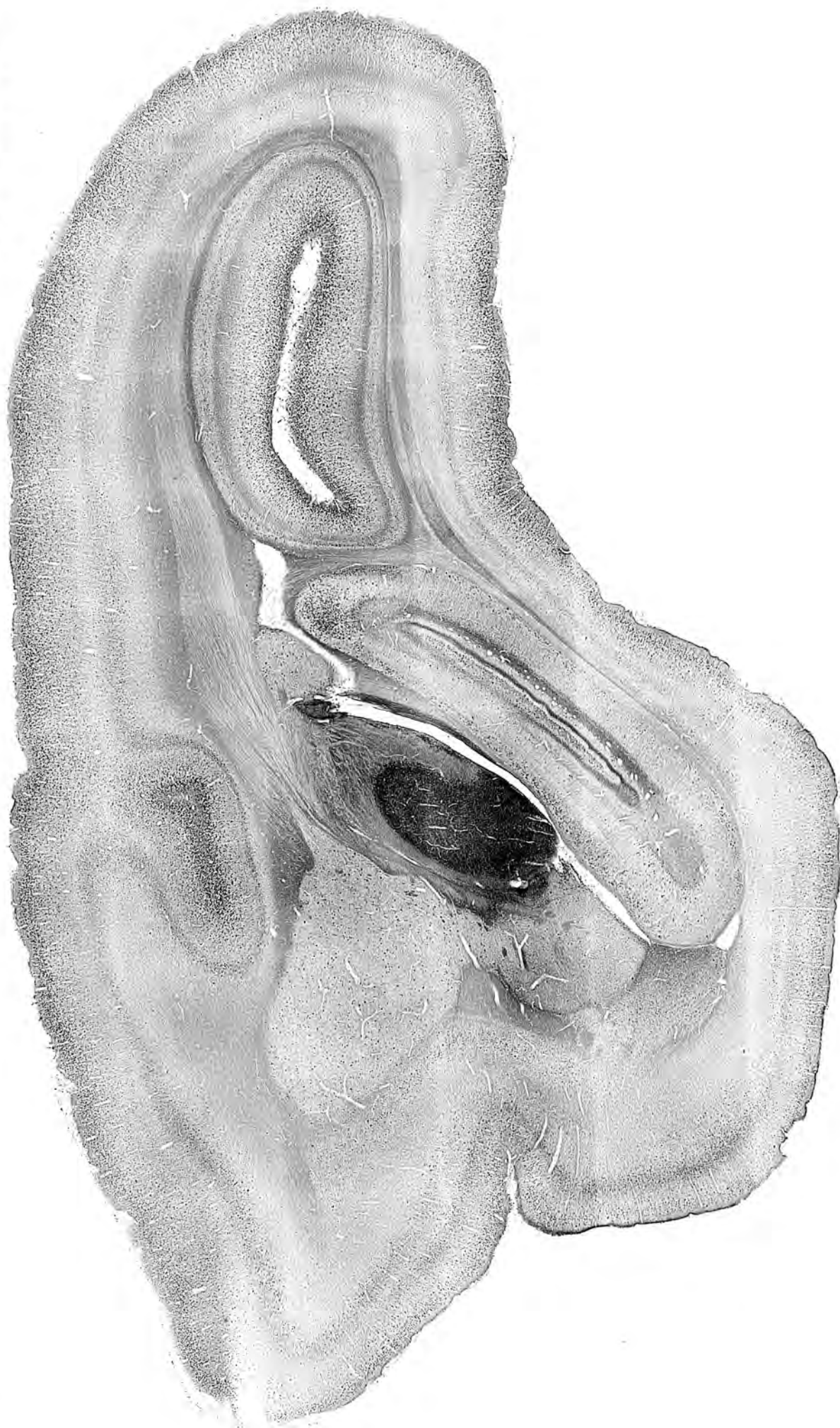
psCR-10



psCR-11



psCR-12



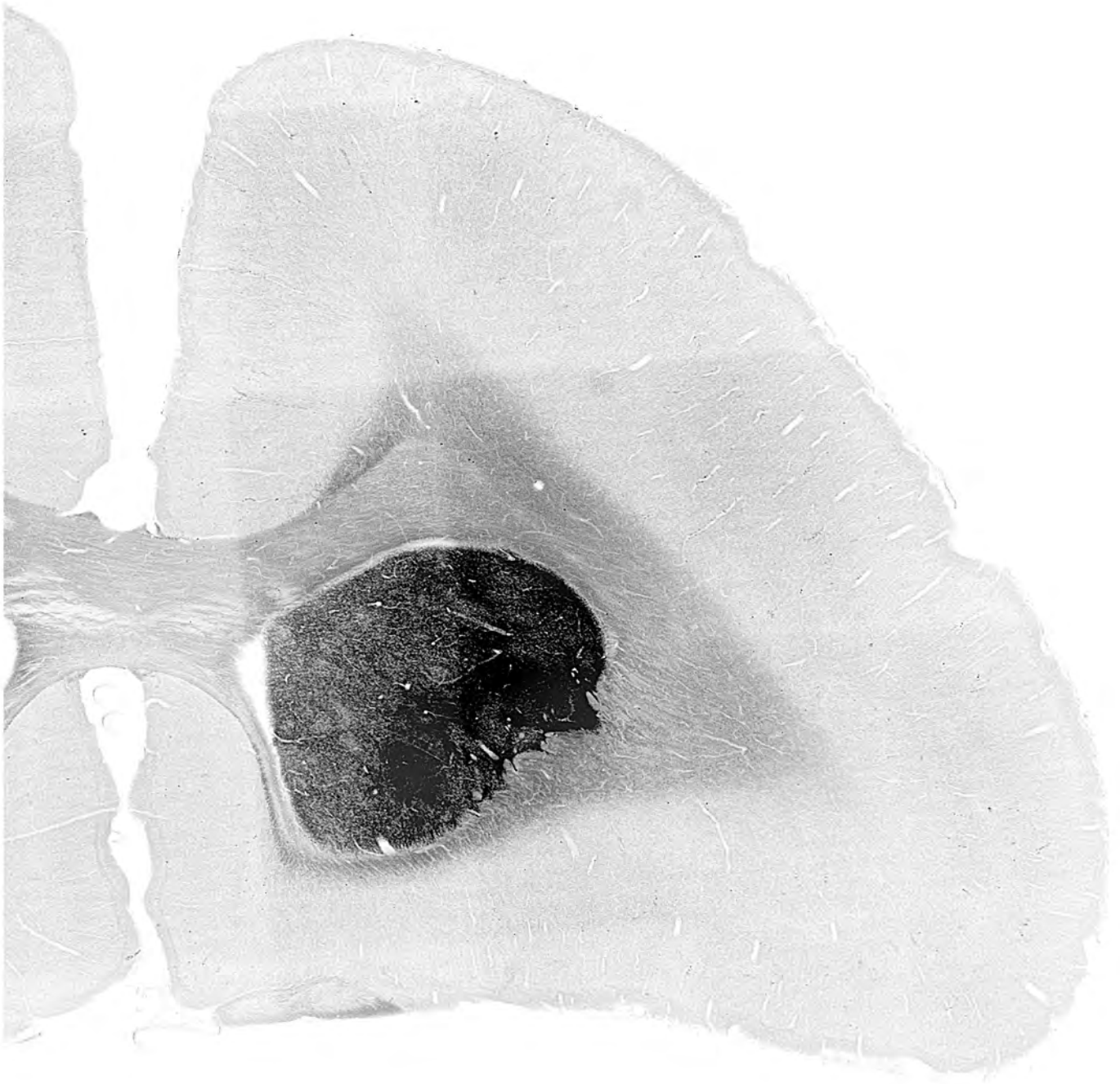
psCR-13



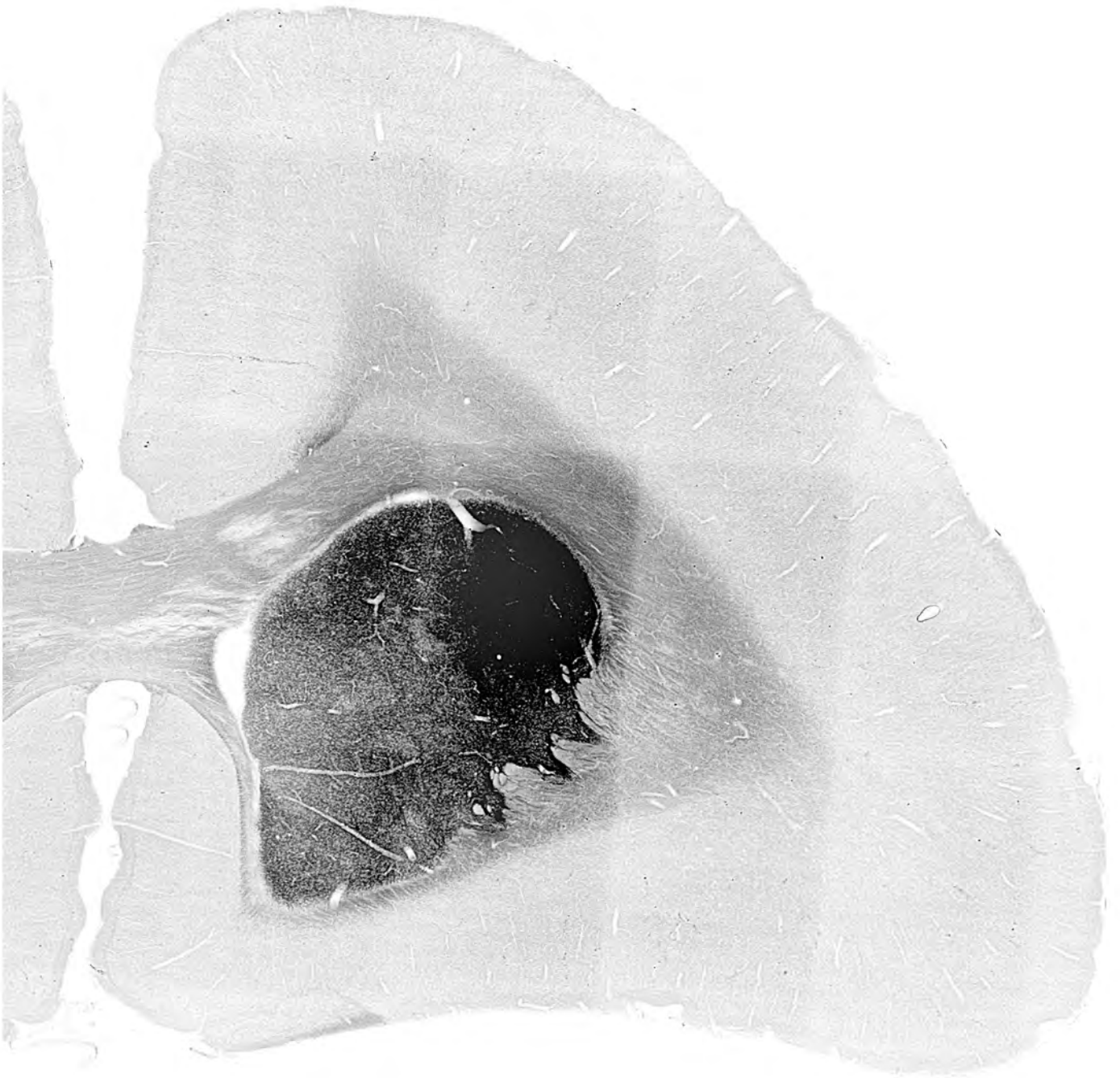
3.3 Plates—tyrosine hydroxylase immunohistochemistry

cTH-06

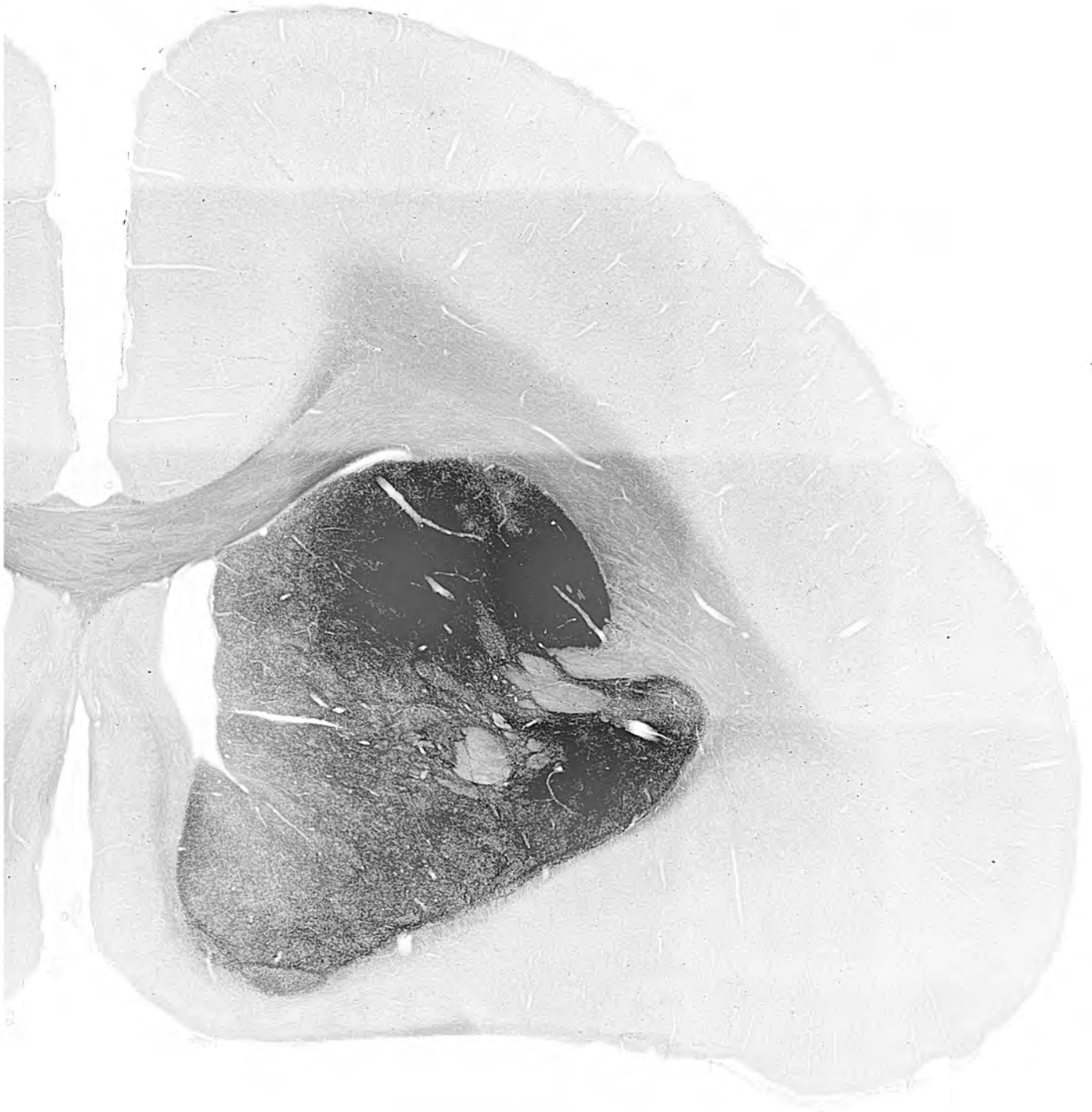




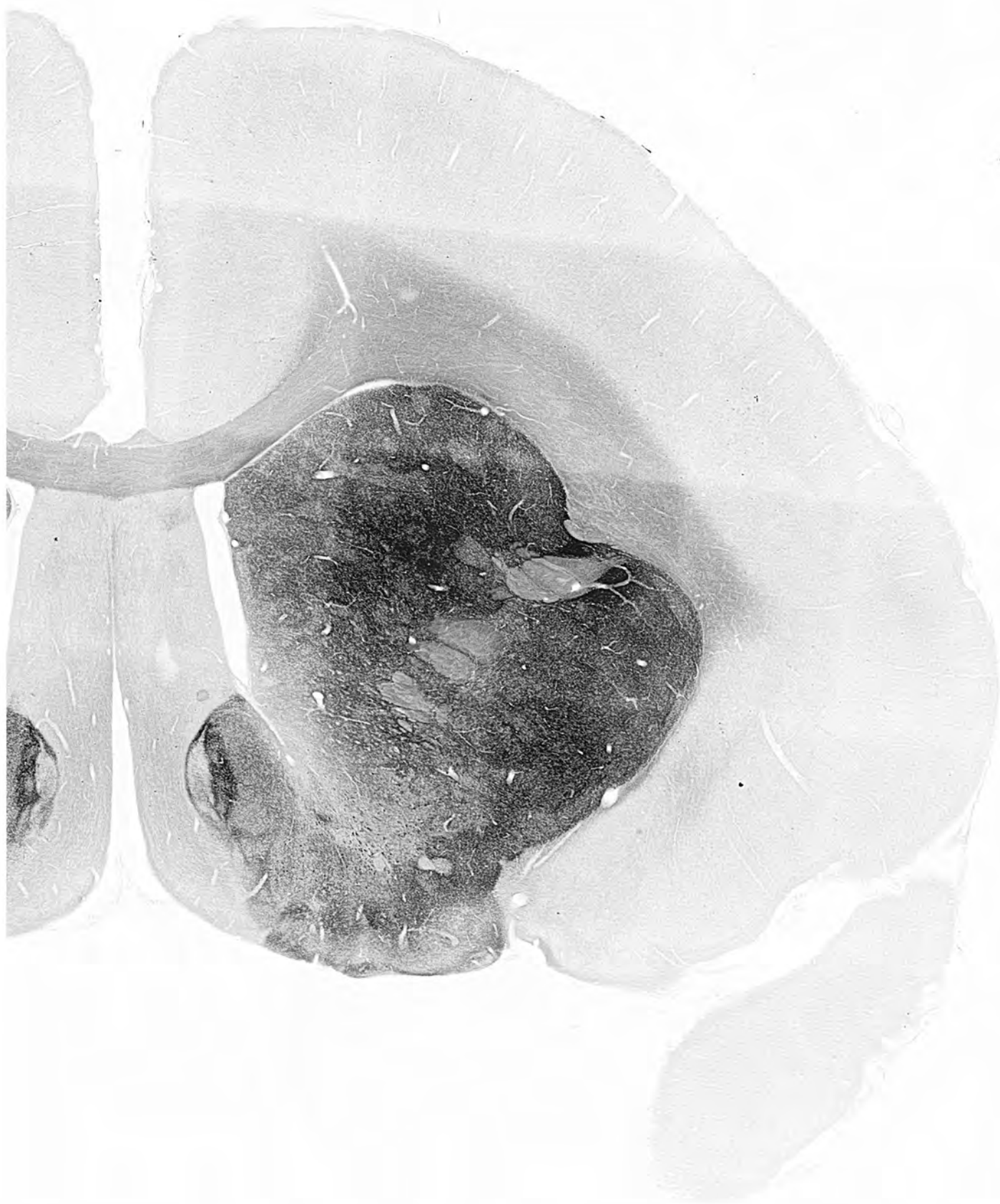
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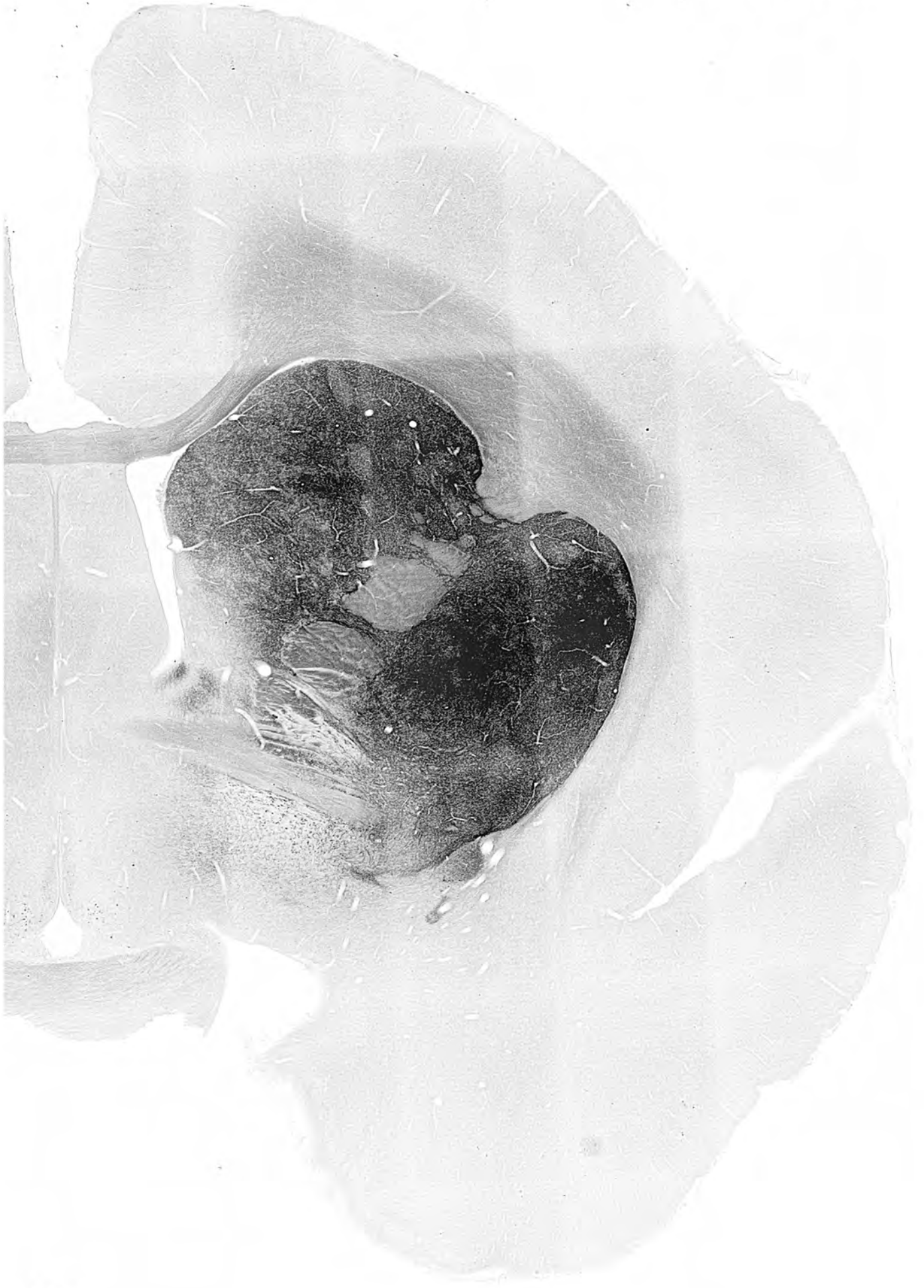


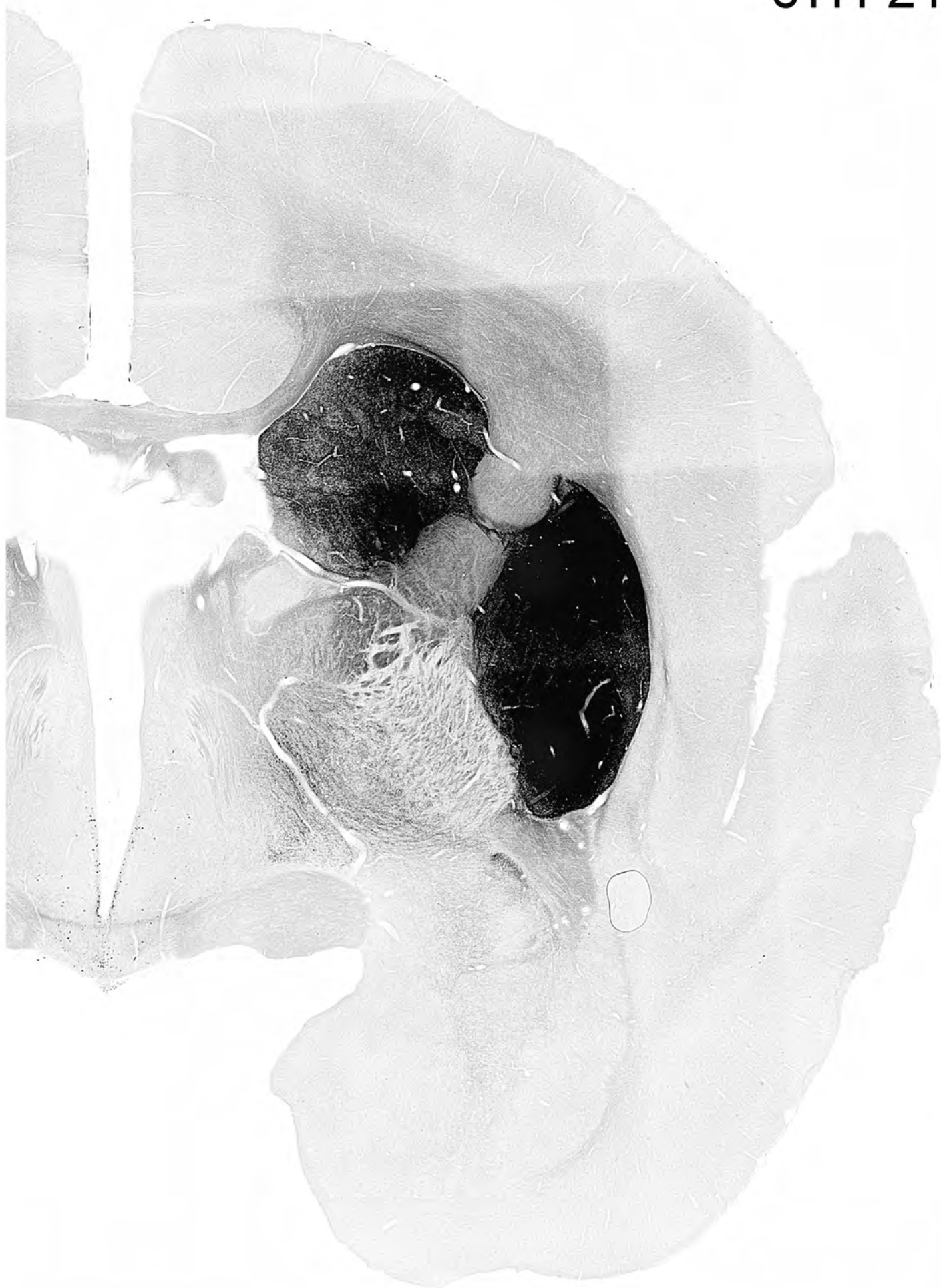


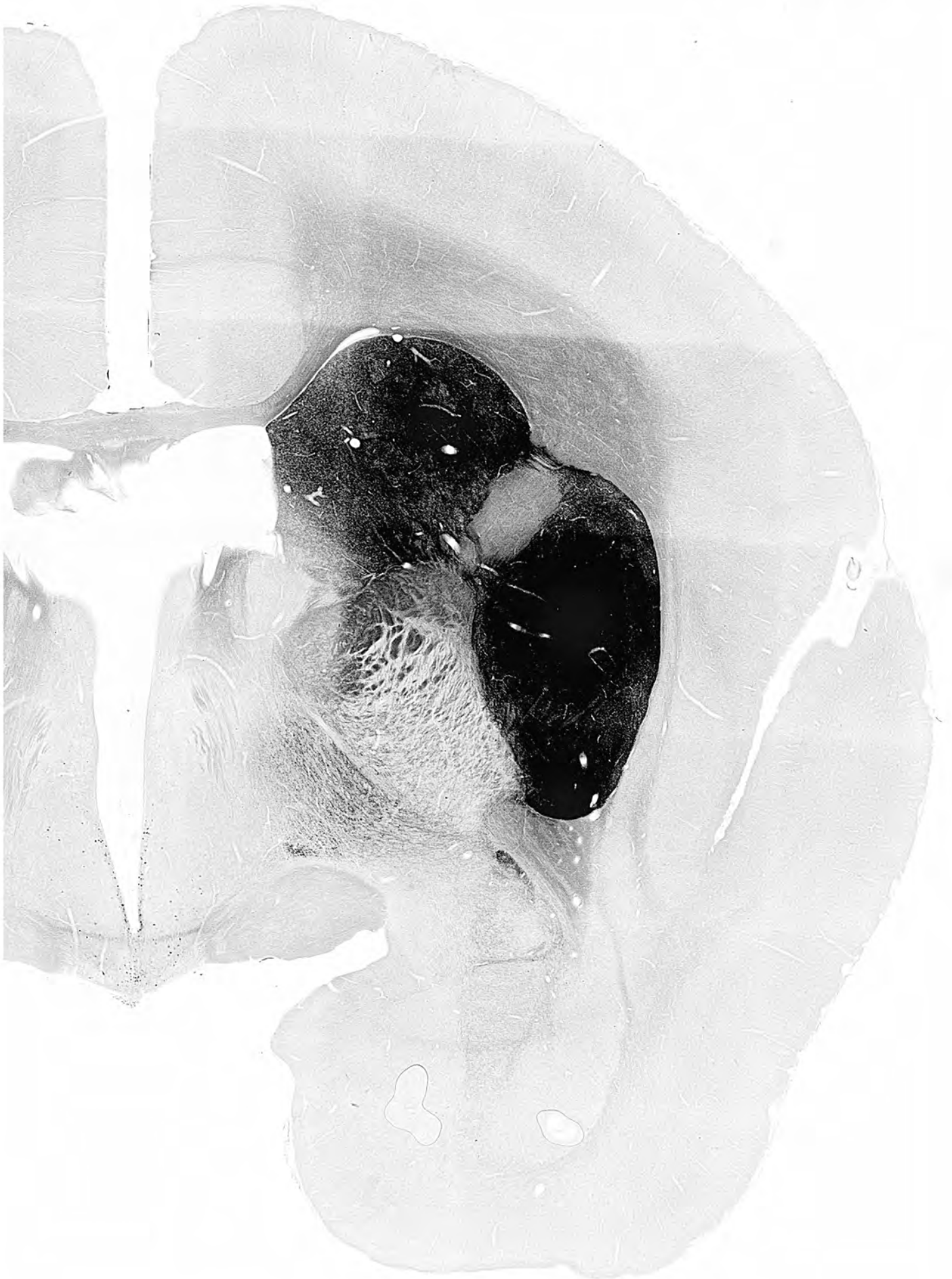


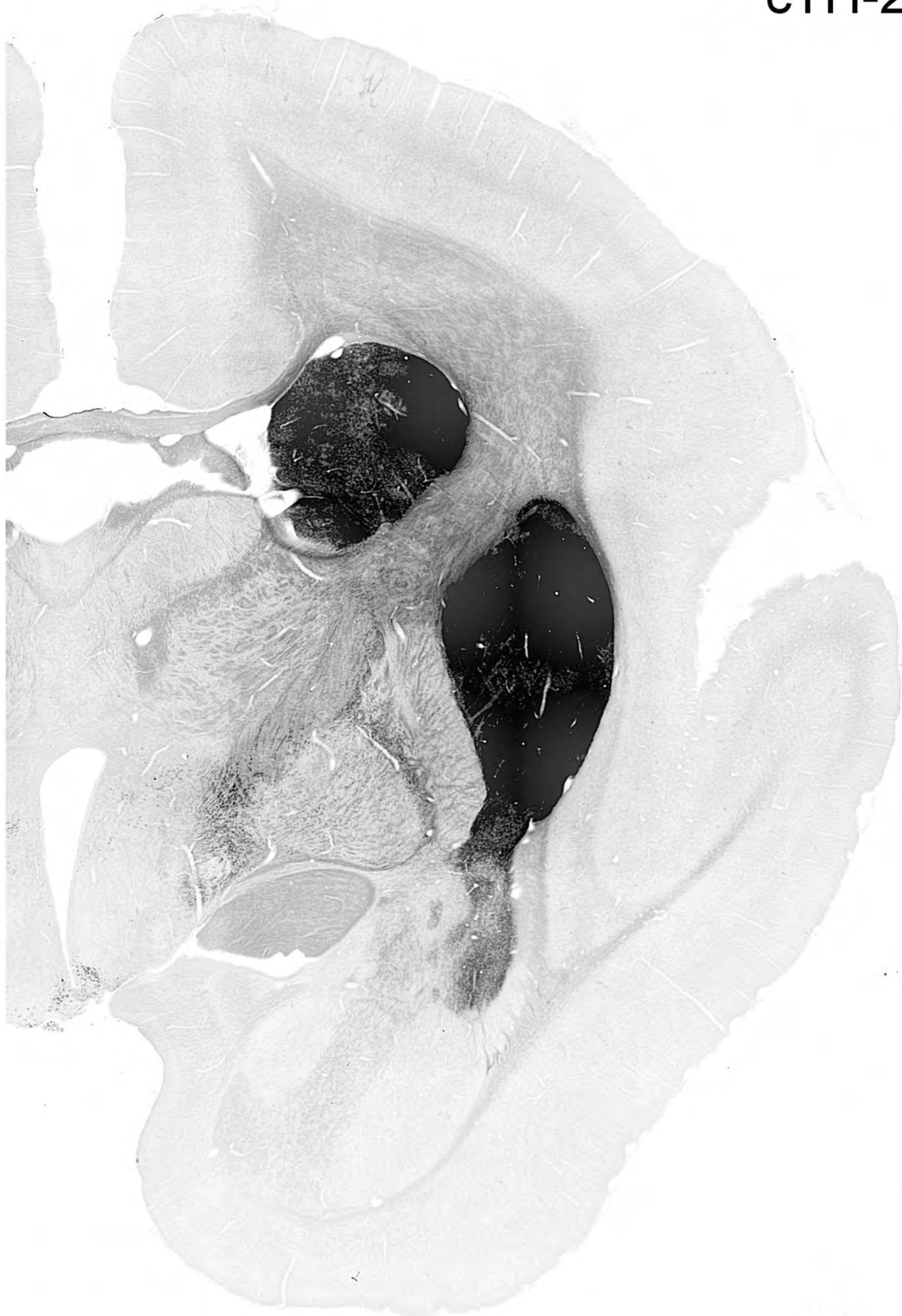


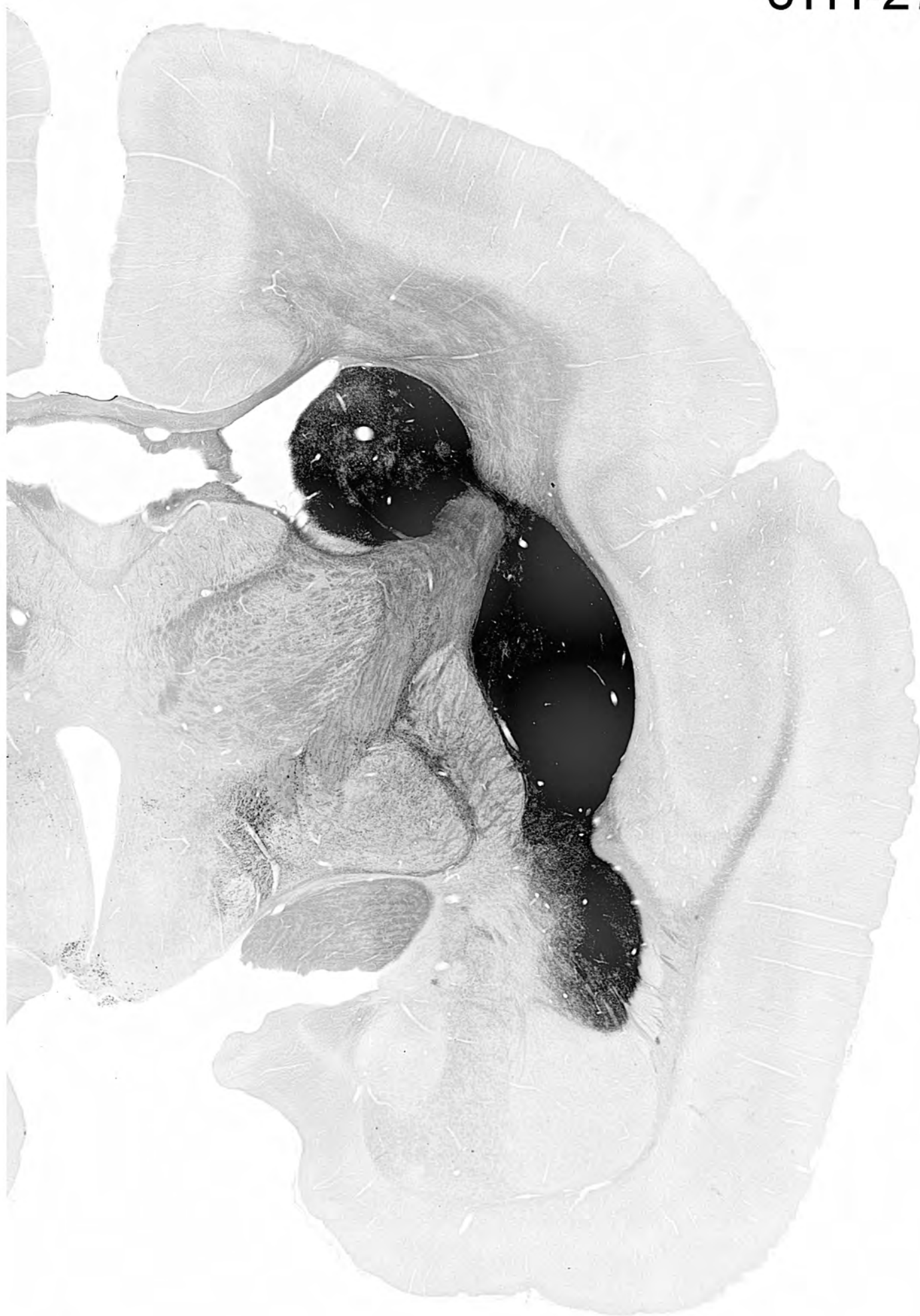




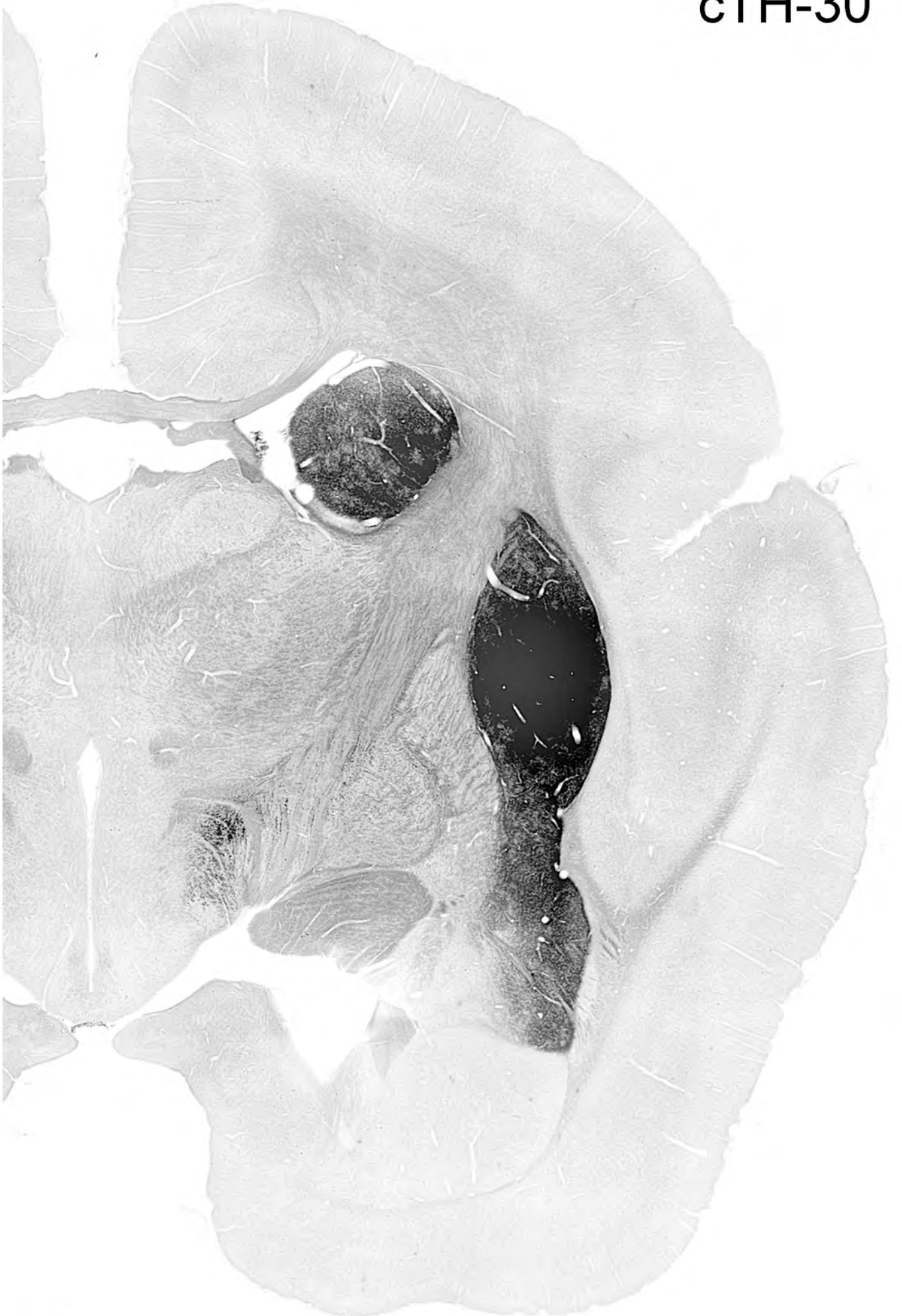


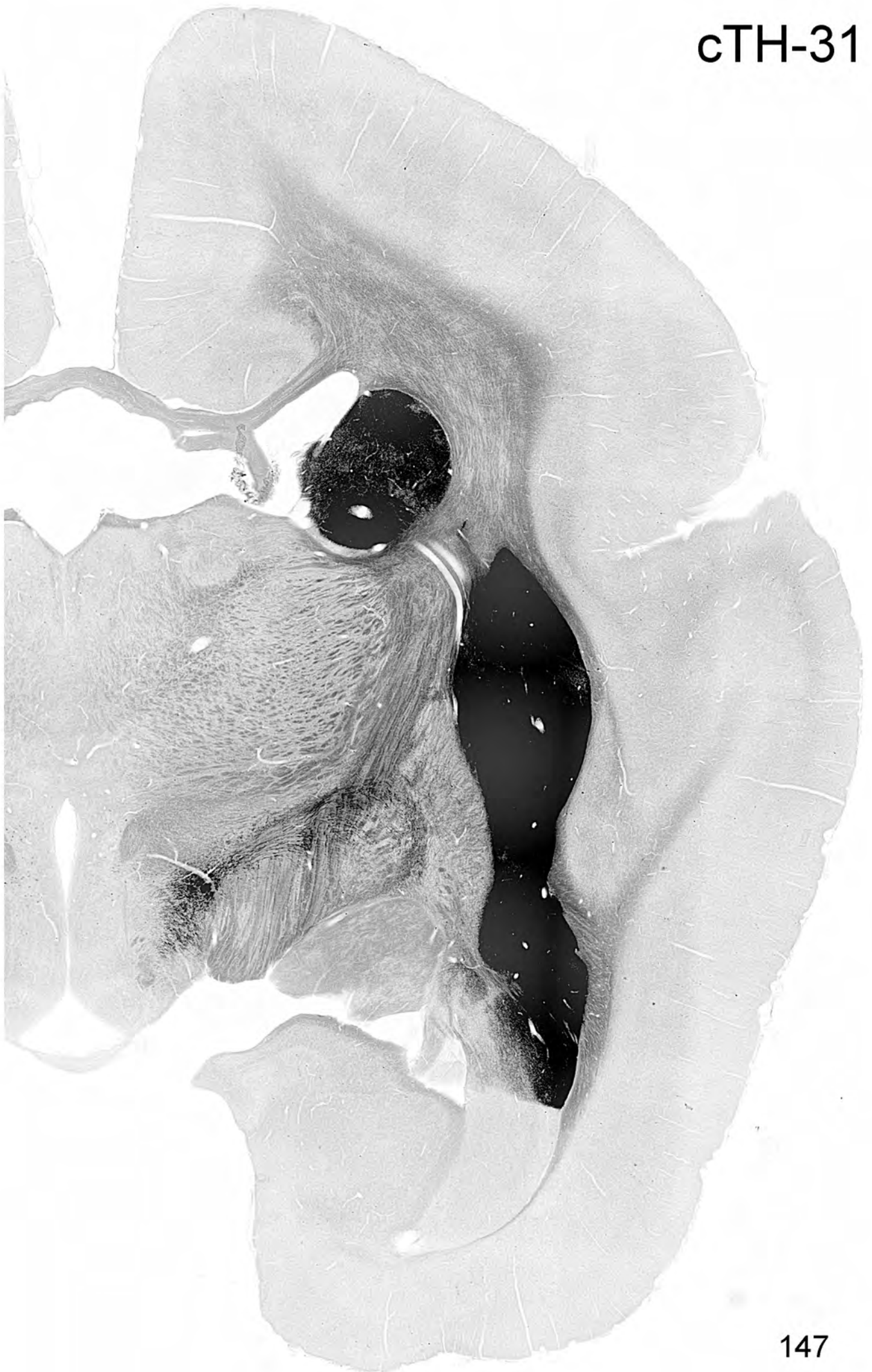


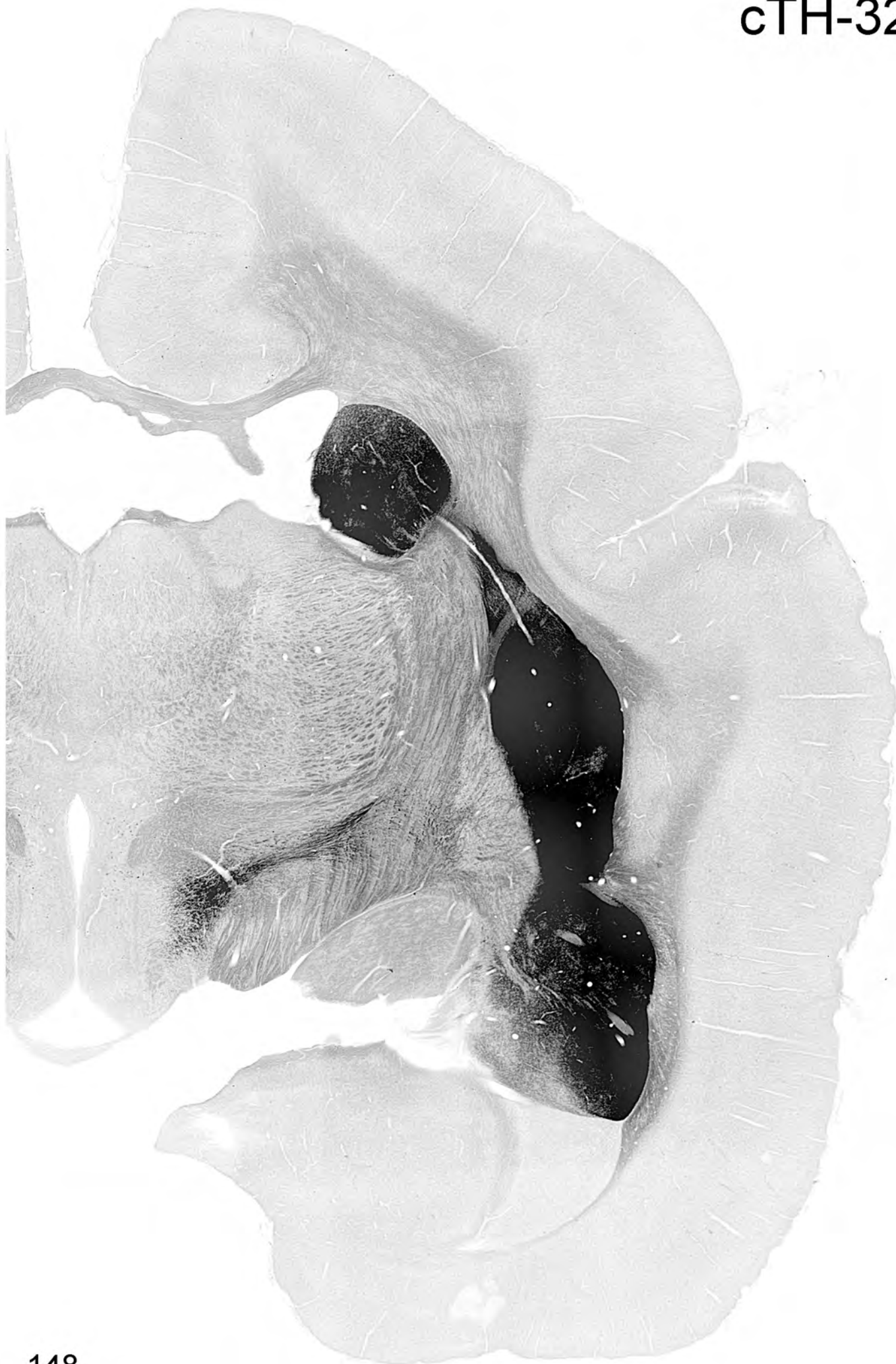






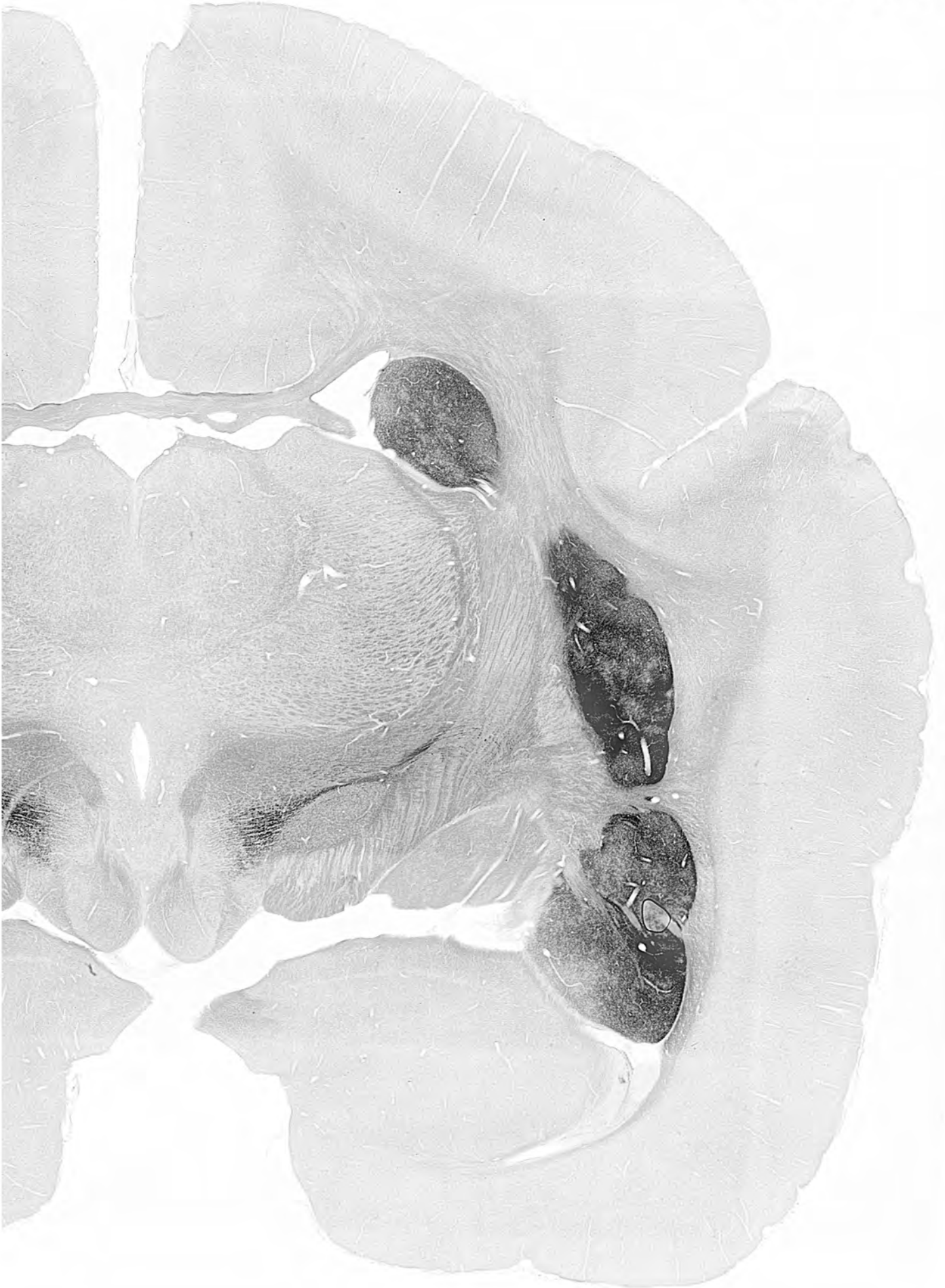




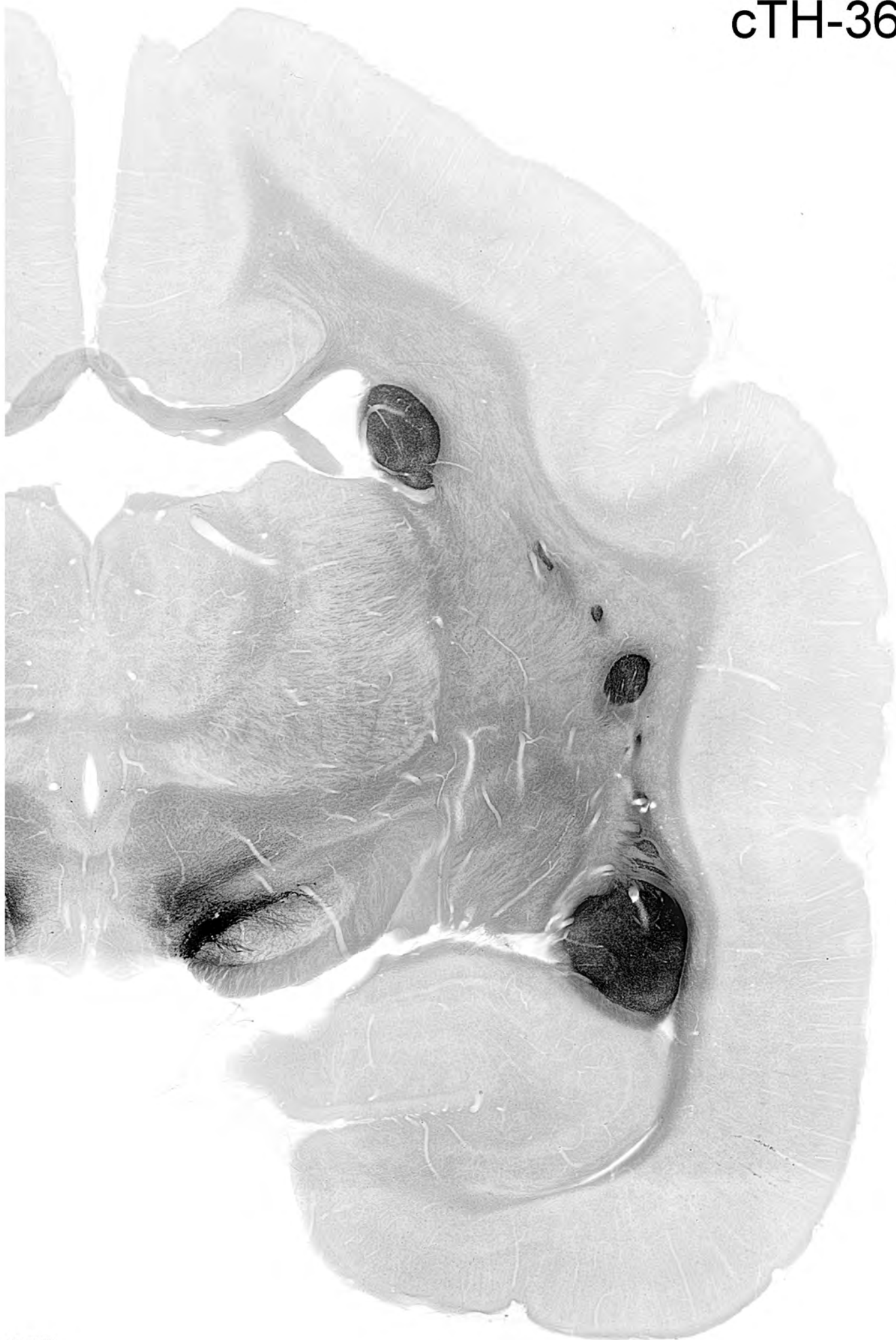


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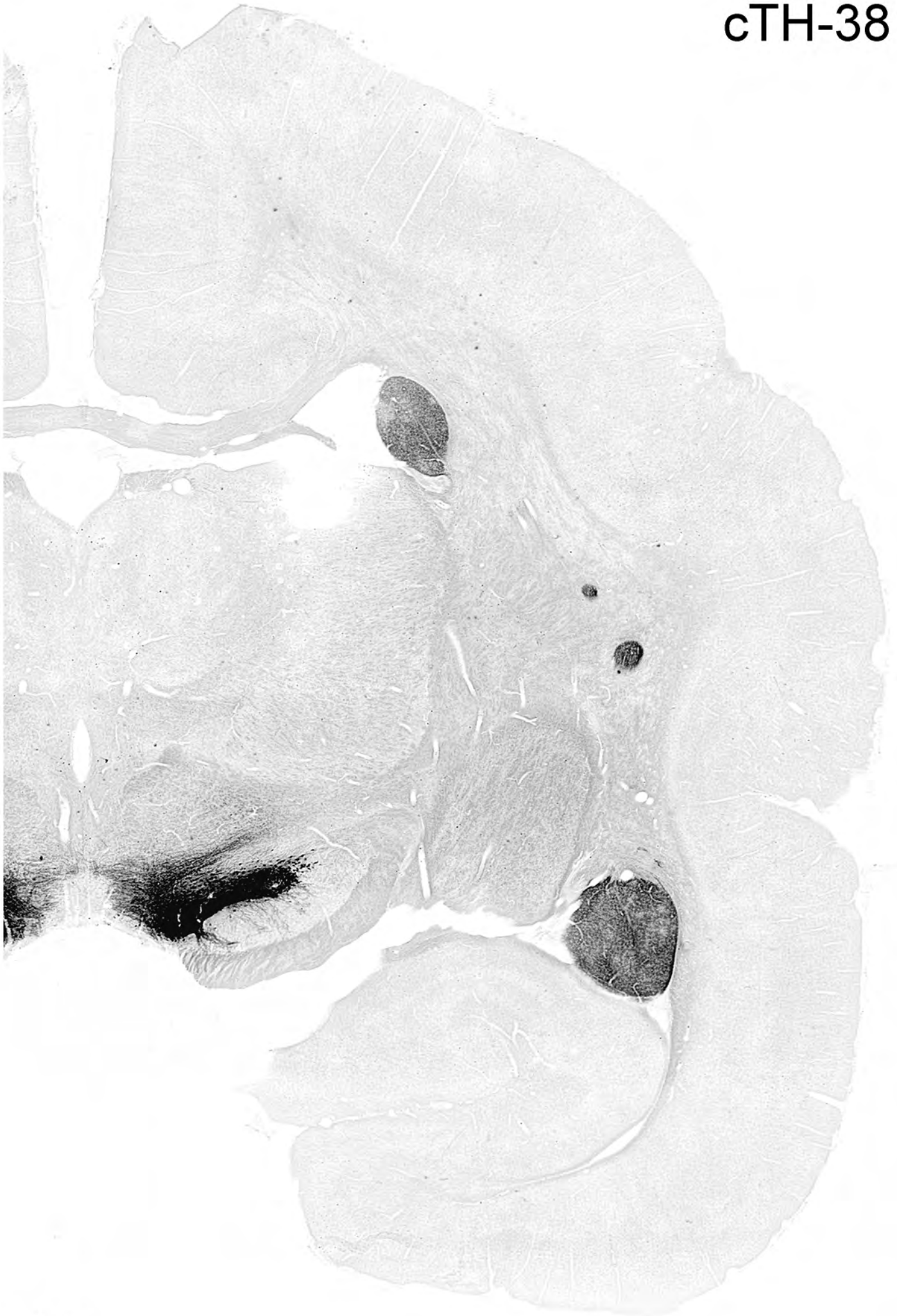








cTH-38



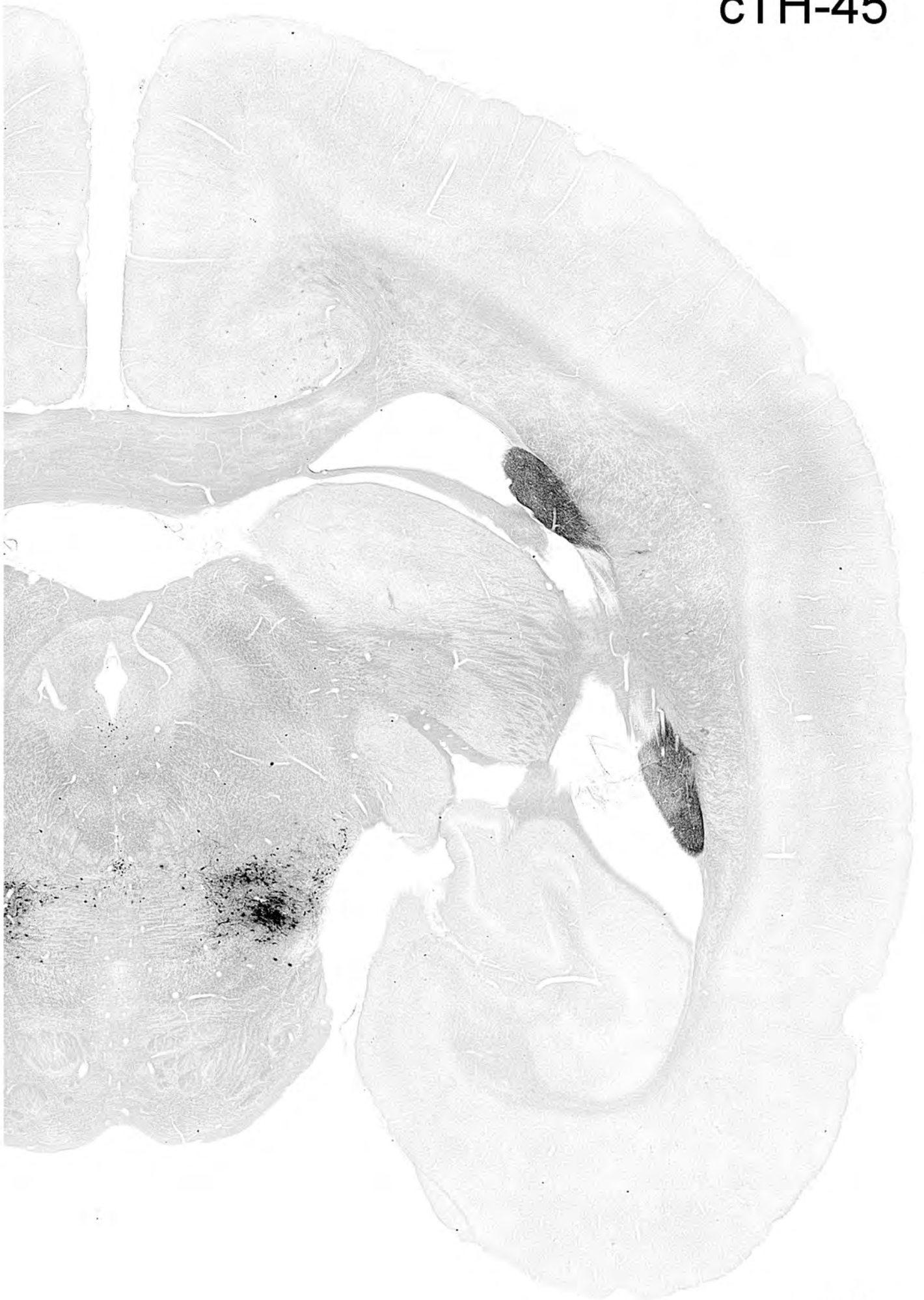
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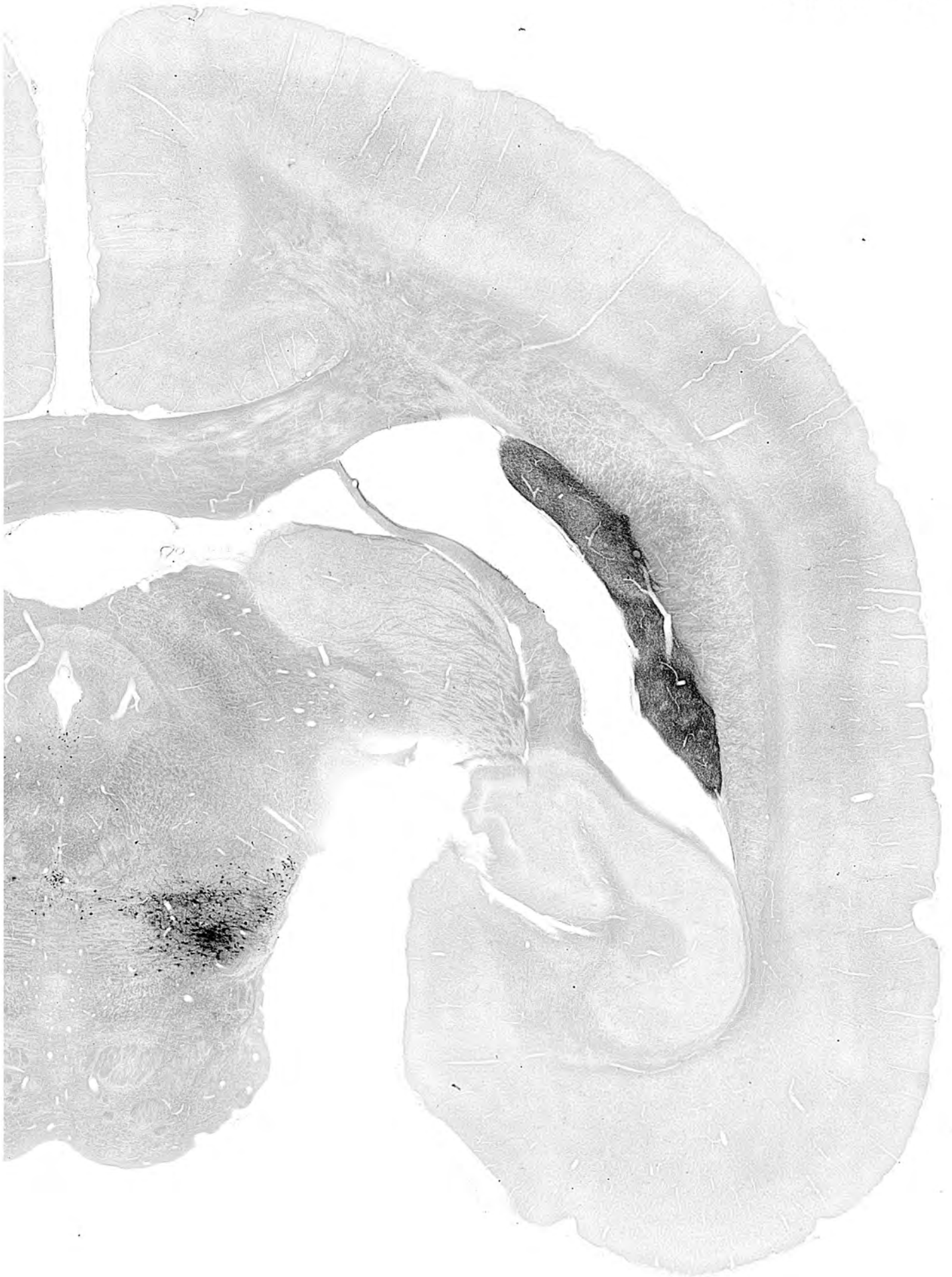


















psTH-02



psTH-03









psTH-07





psTH-10



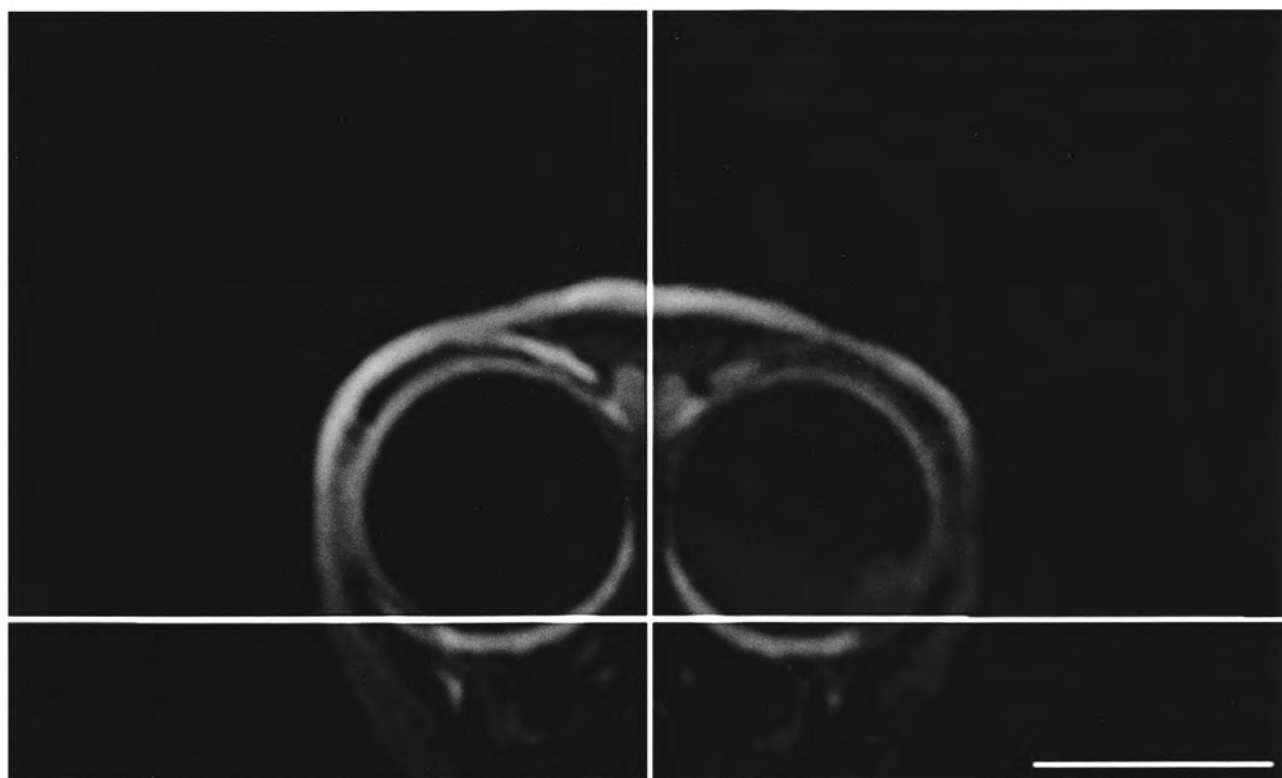
psTH-11



psTH-12



3.4 Plates—MRI data

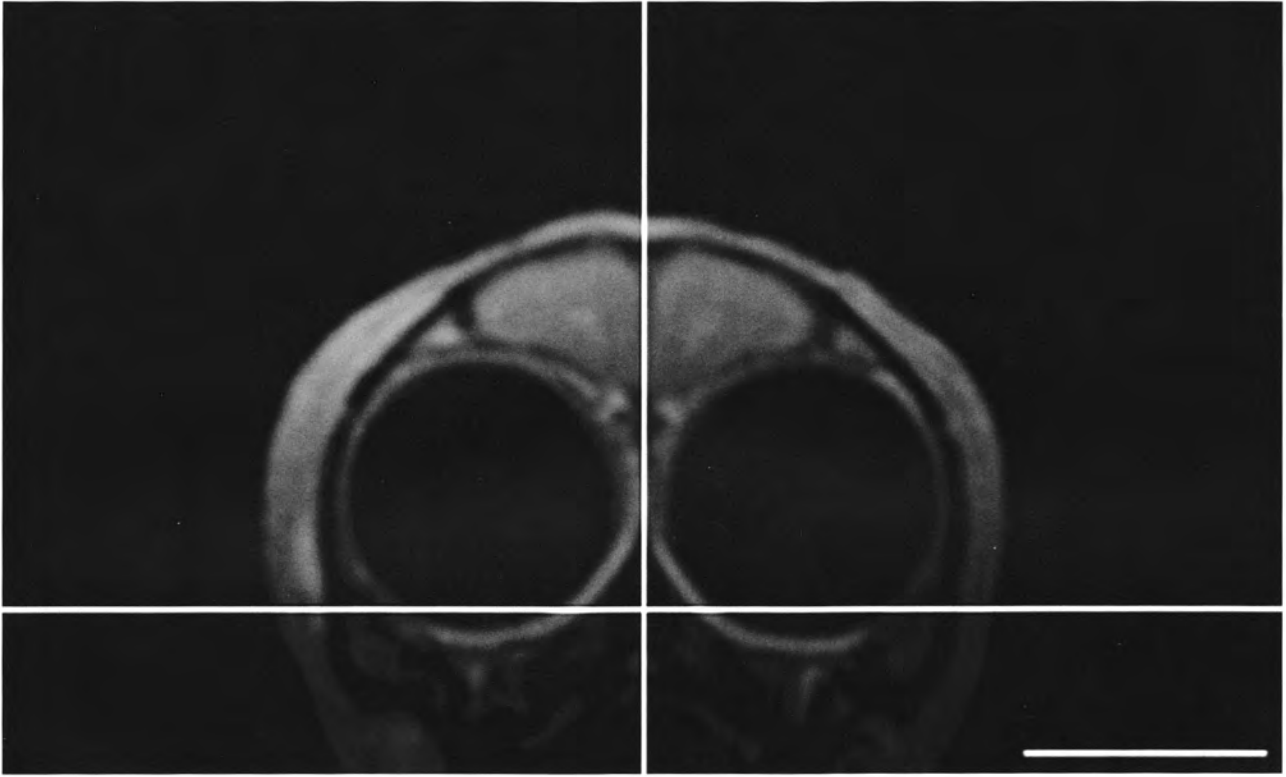


21 mm rostral to the interaural line; $y=+21$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

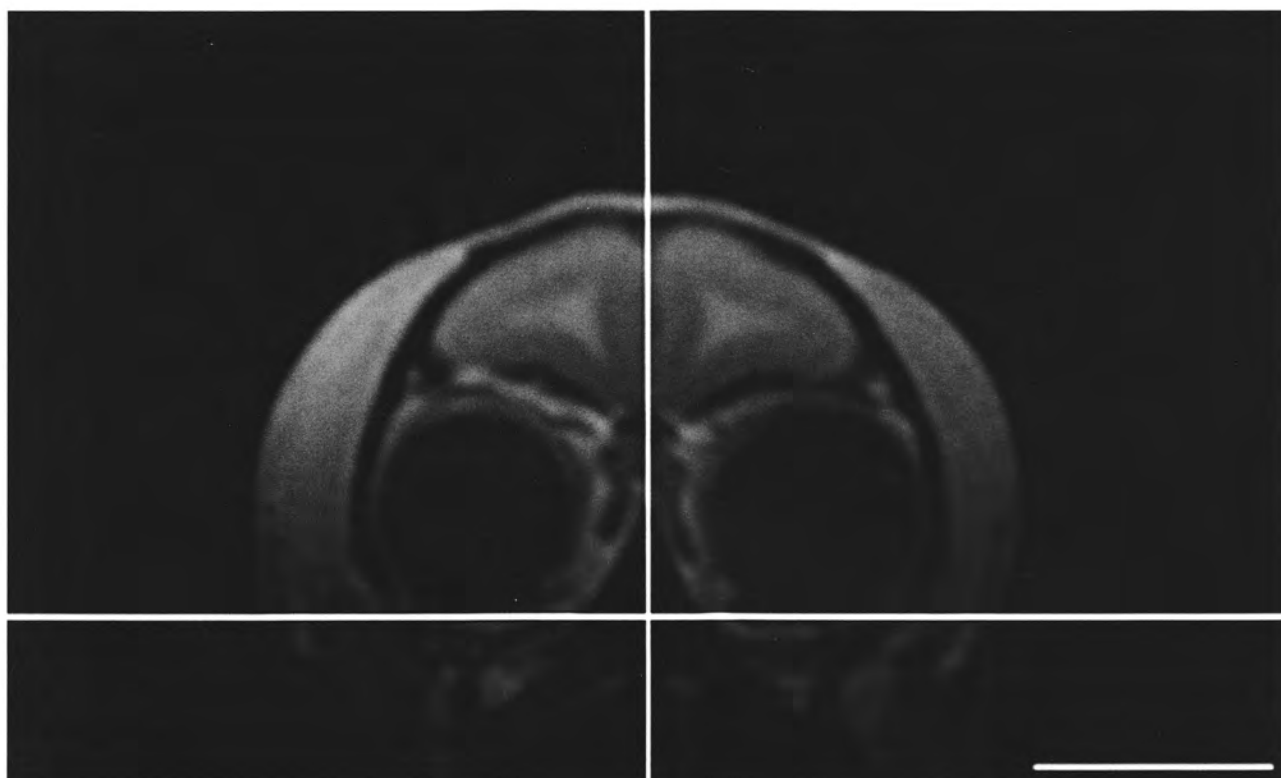


18 mm rostral to the interaural line; $y=+18$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

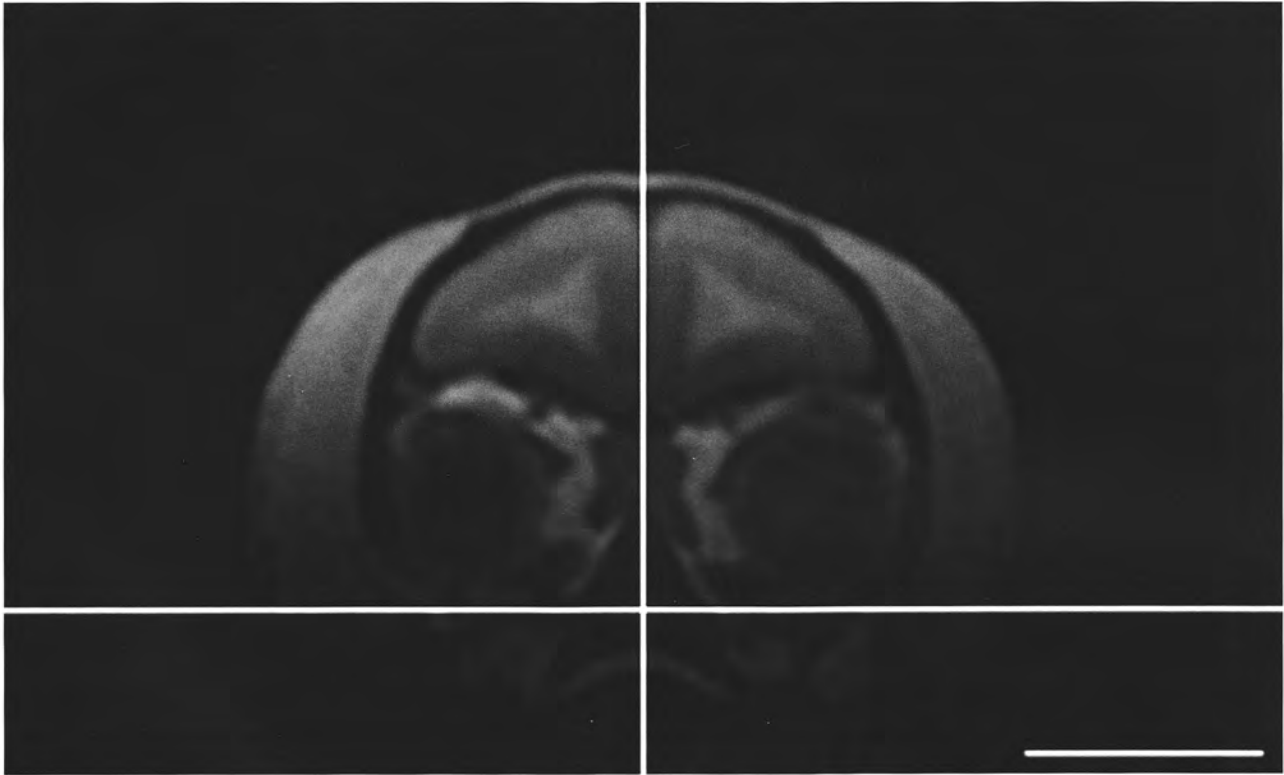


16 mm rostral to the interaural line; $y=+16$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

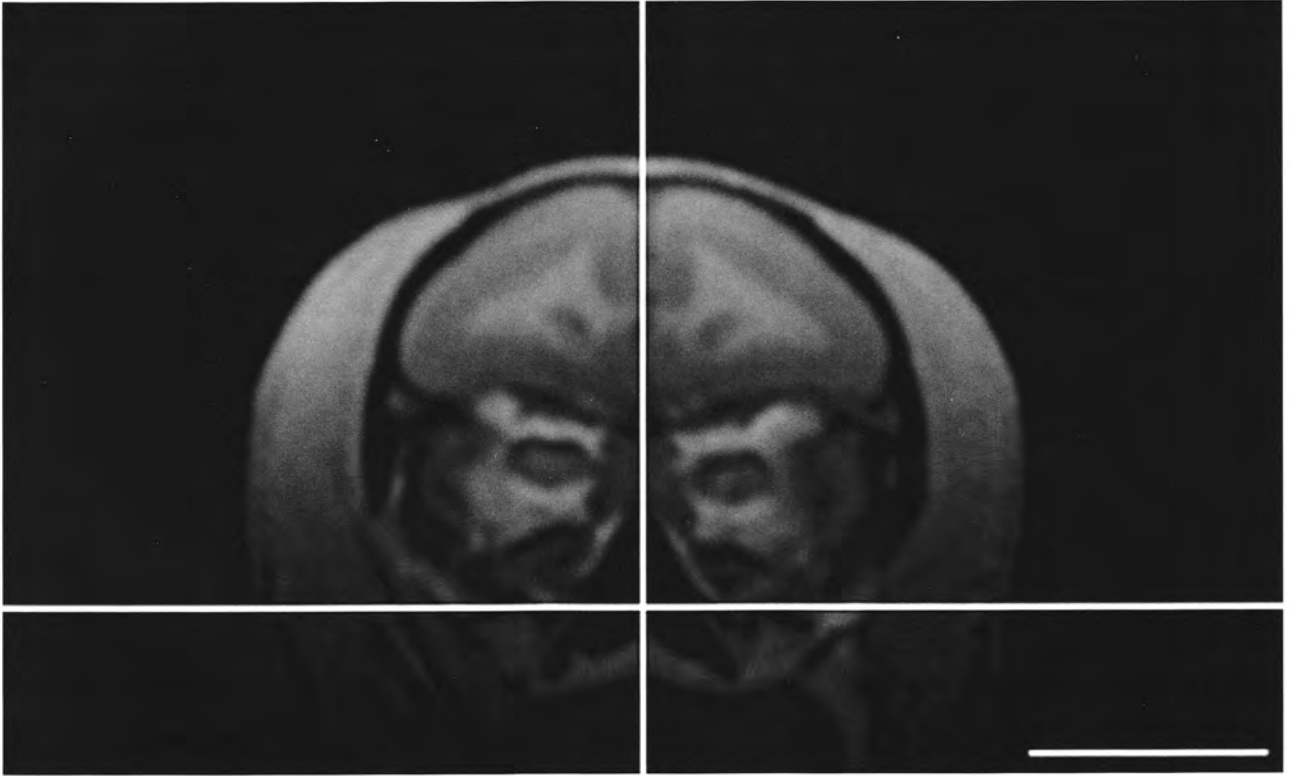


15 mm rostral to the interaural line; $y=+15$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

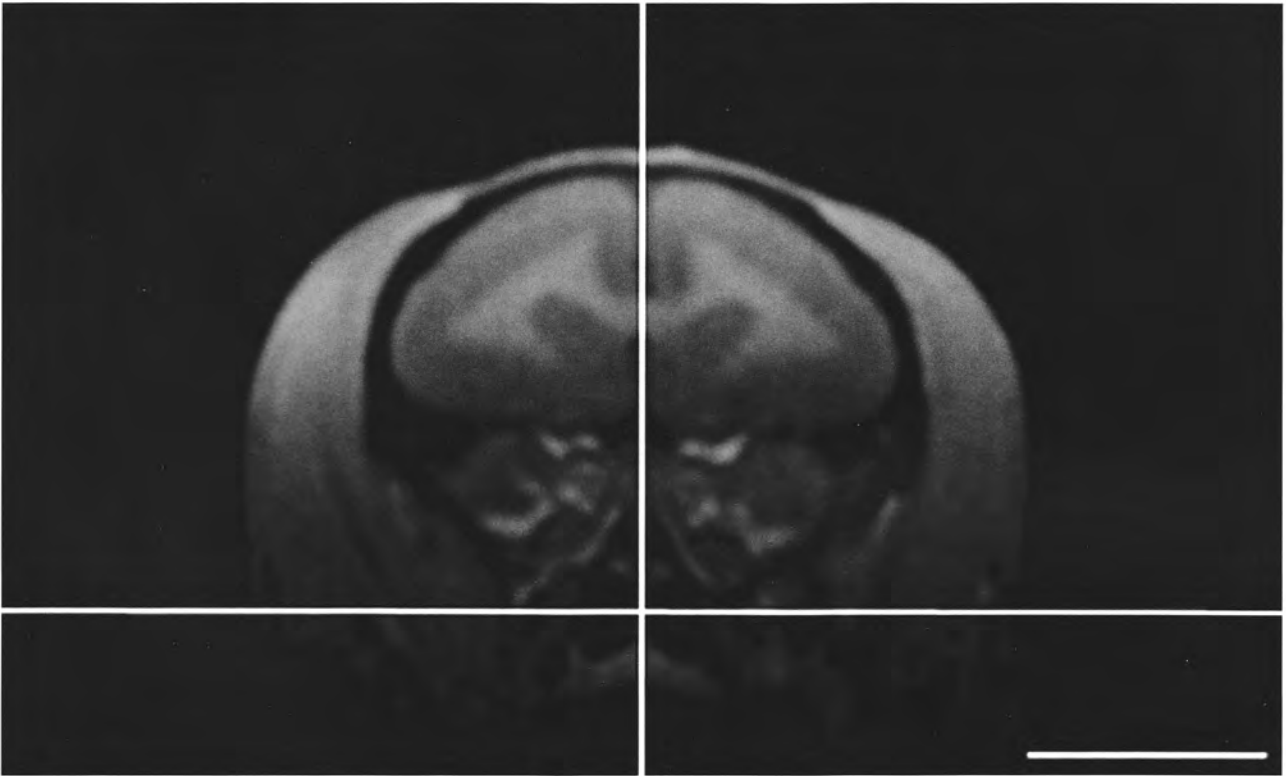


14 mm rostral to the interaural line; $y=+14$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

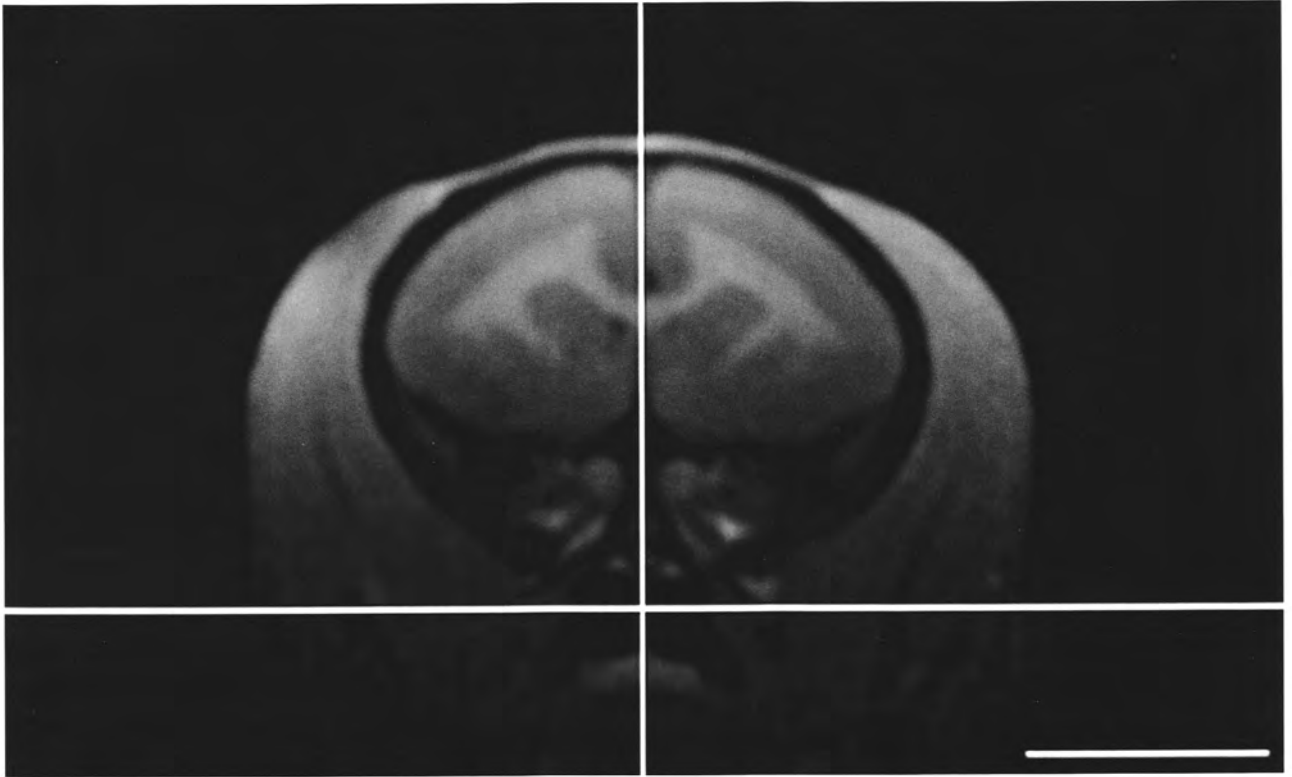


13 mm rostral to the interaural line; $y=+13$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

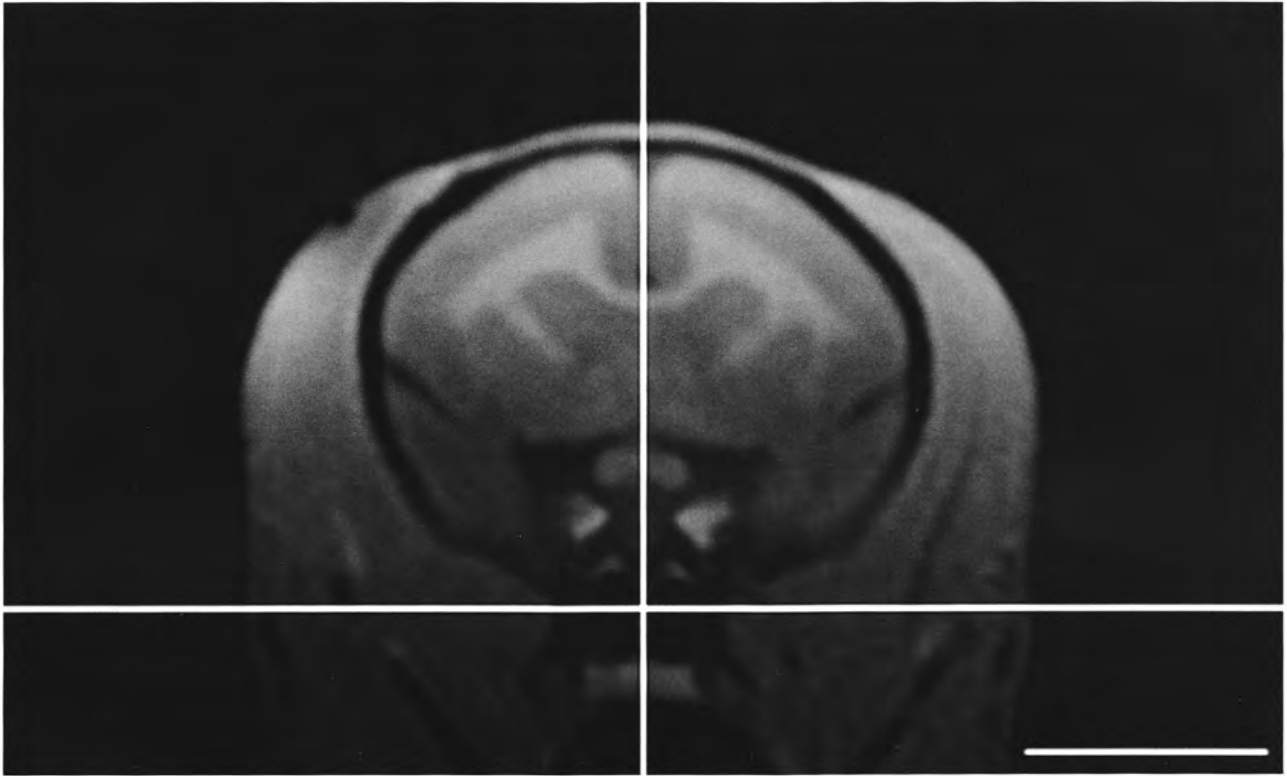


12 mm rostral to the interaural line; $y=+12$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

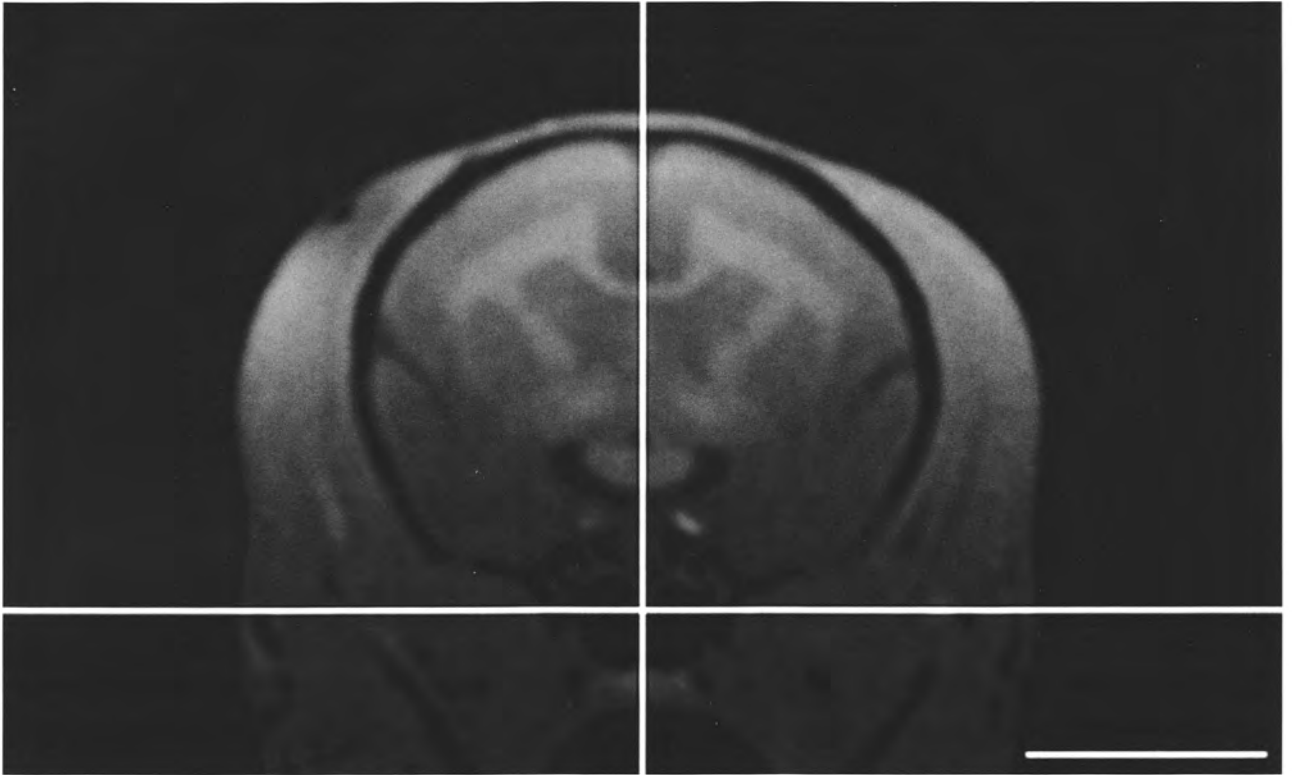


11 mm rostral to the interaural line; $y=+11$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



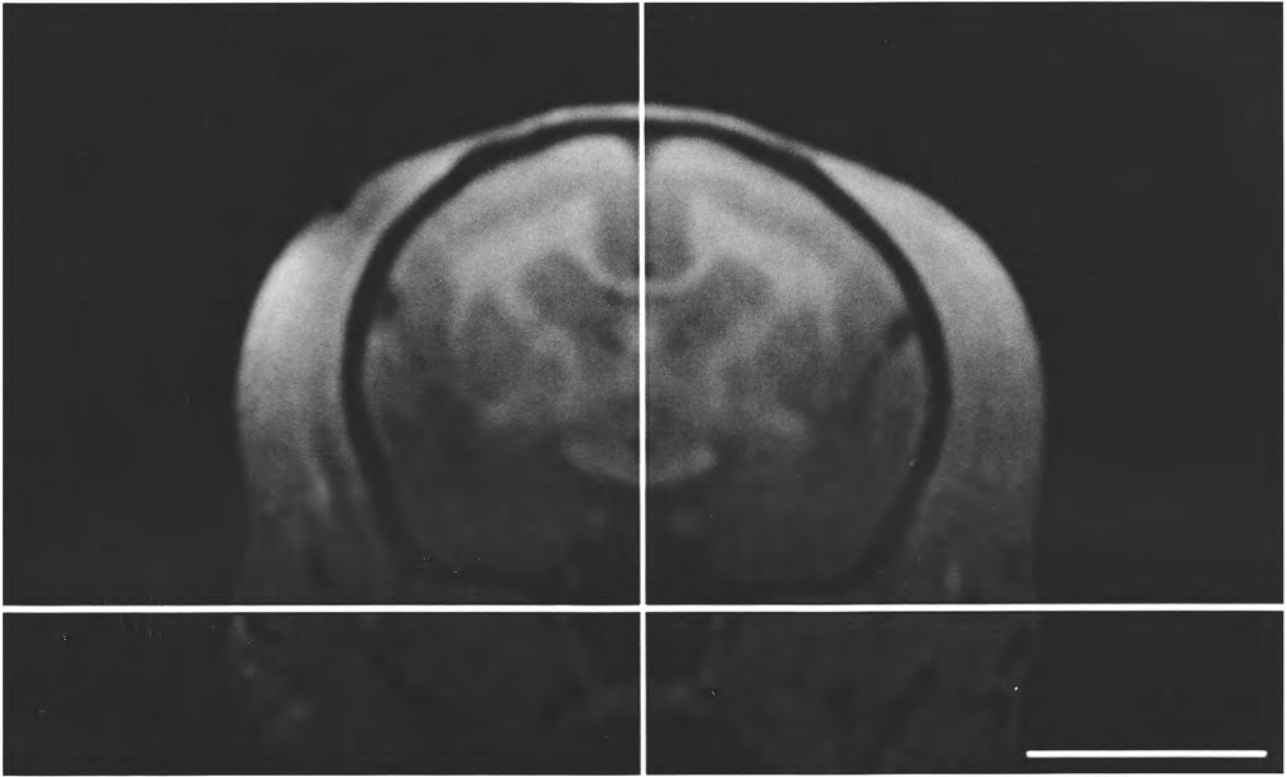
10 mm rostral to the interaural line; $y=+10$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-10

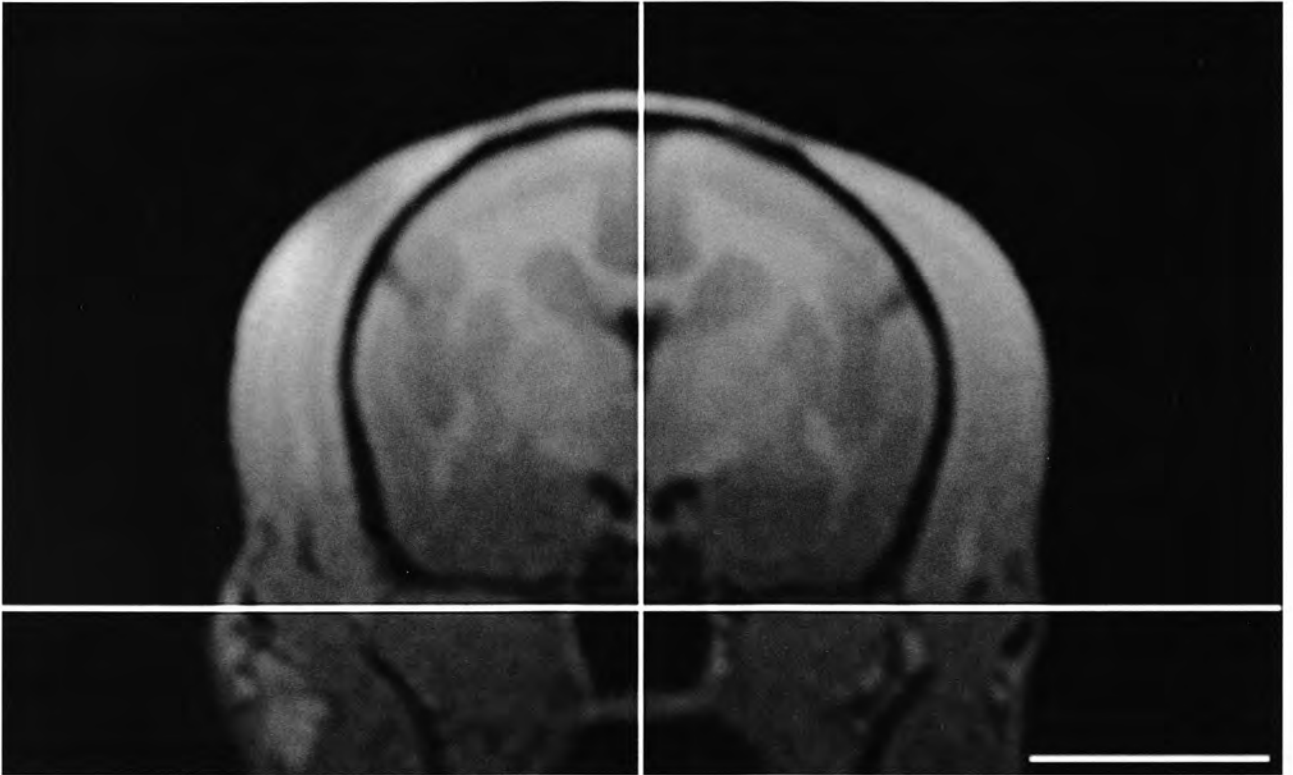


9 mm rostral to the interaural line; $y=+9$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



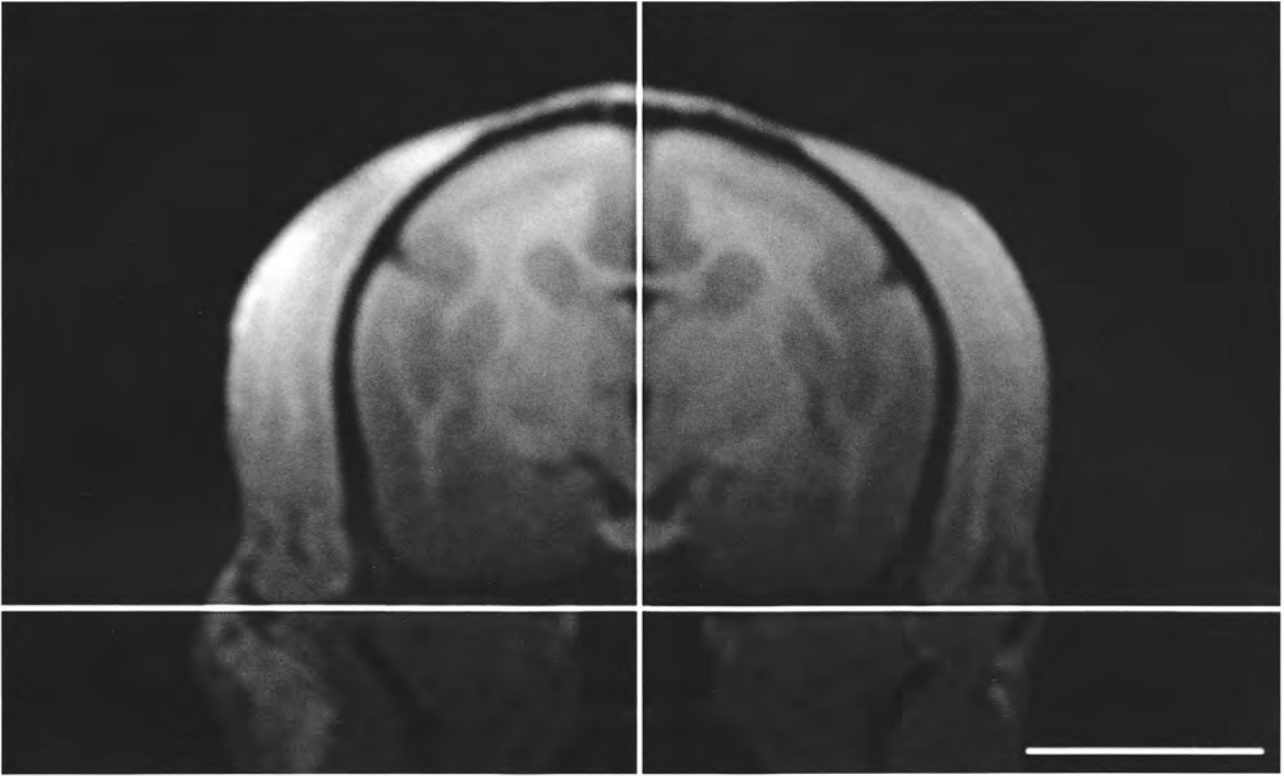
8 mm rostral to the interaural line; $y=+8$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-12

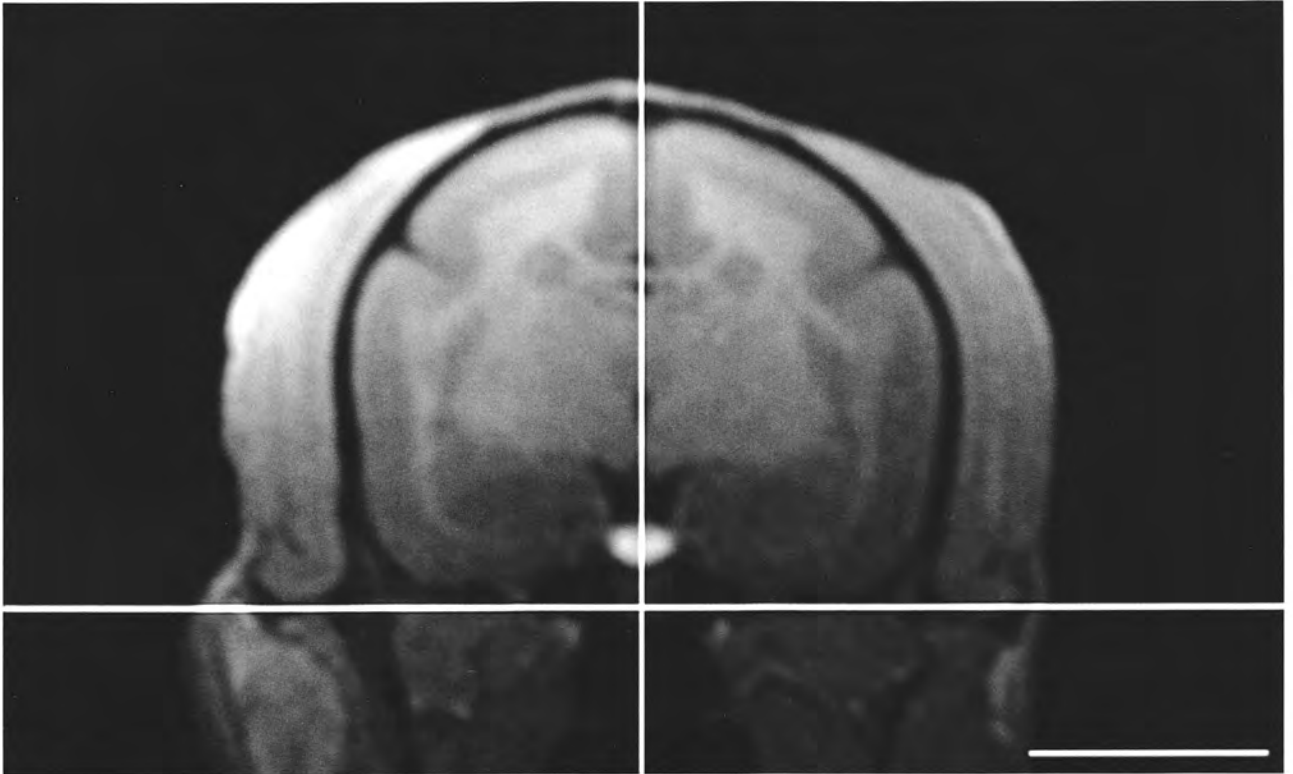


7 mm rostral to the interaural line; $y=+7$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



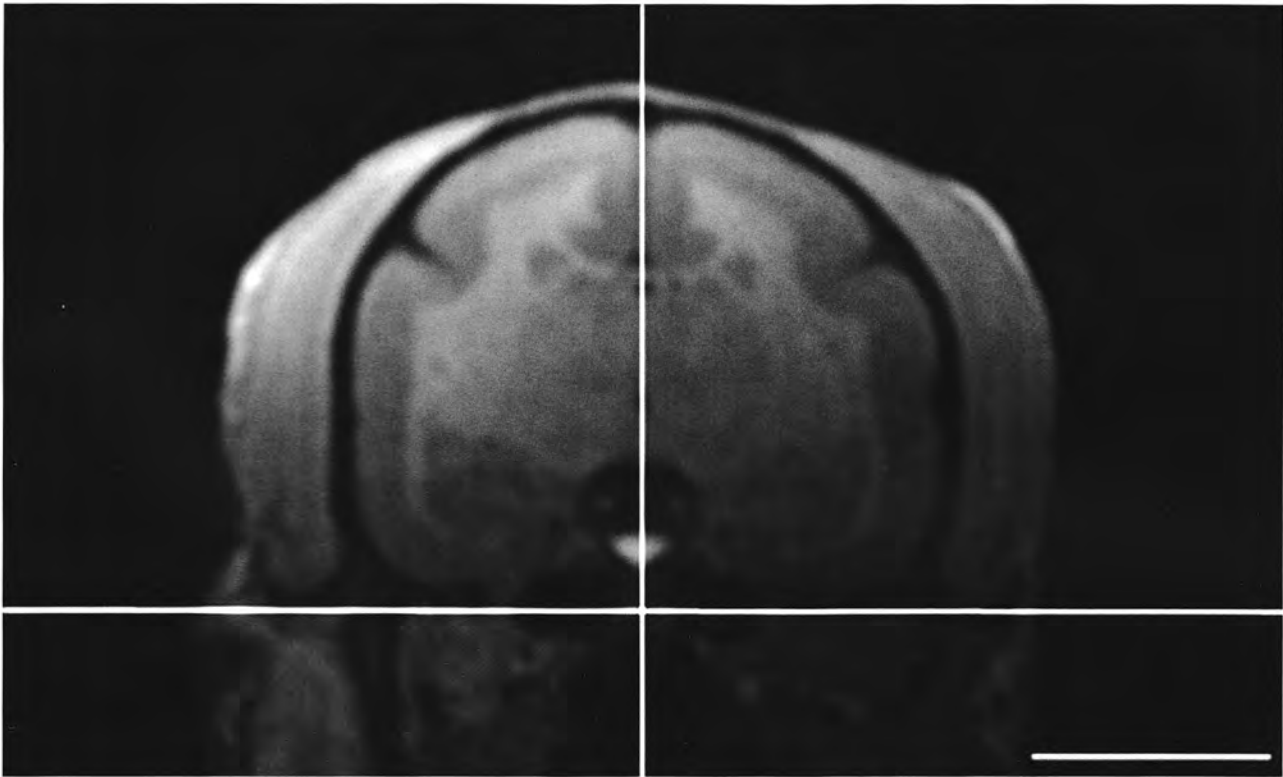
6 mm rostral to the interaural line; $y=+6$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-14

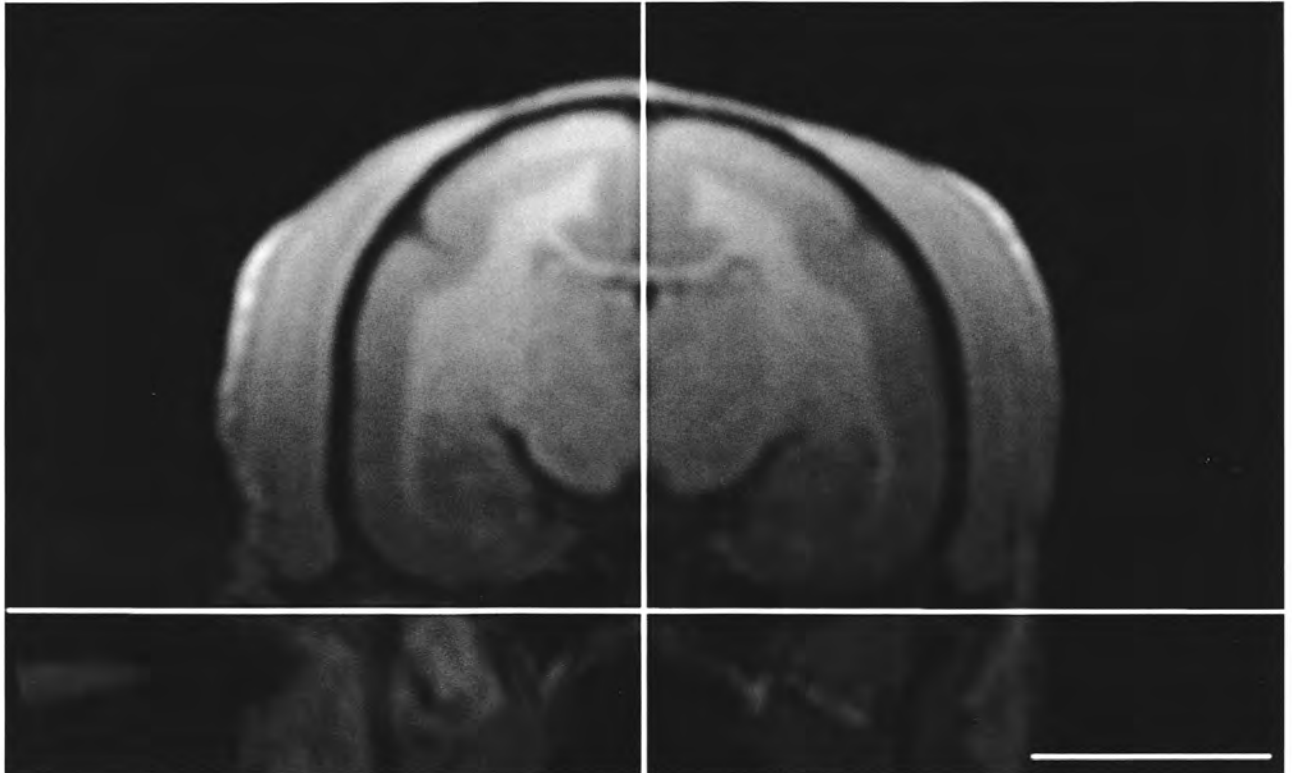


5 mm rostral to the interaural line; $y=+5$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



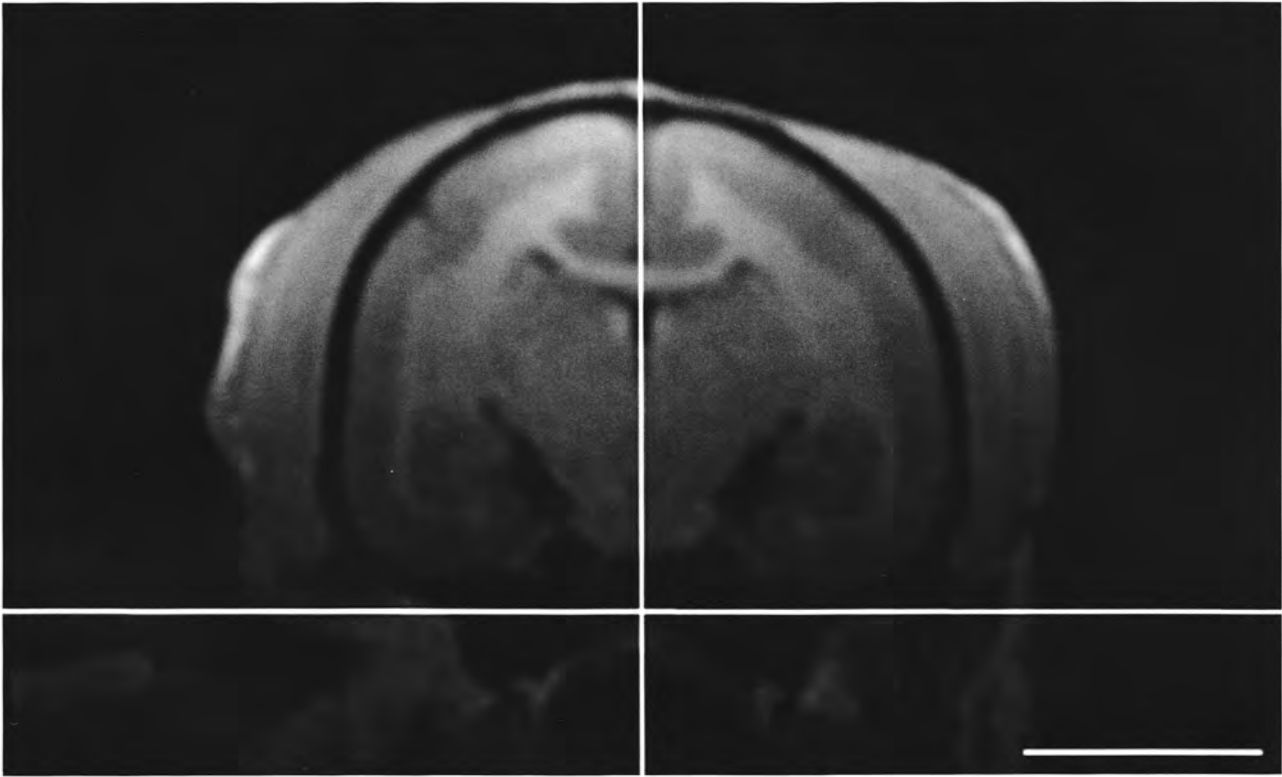
4 mm rostral to the interaural line; $y=+4$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-16

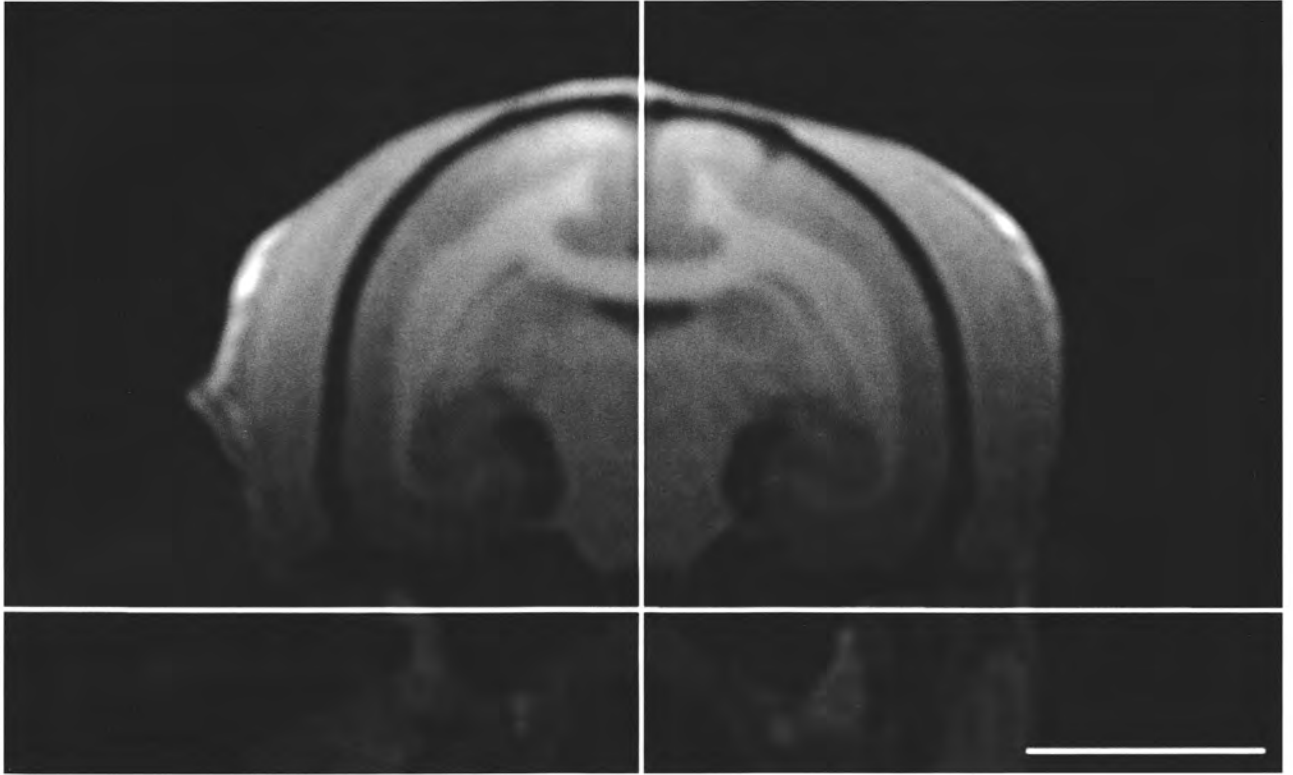


3 mm rostral to the interaural line; $y=+3$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



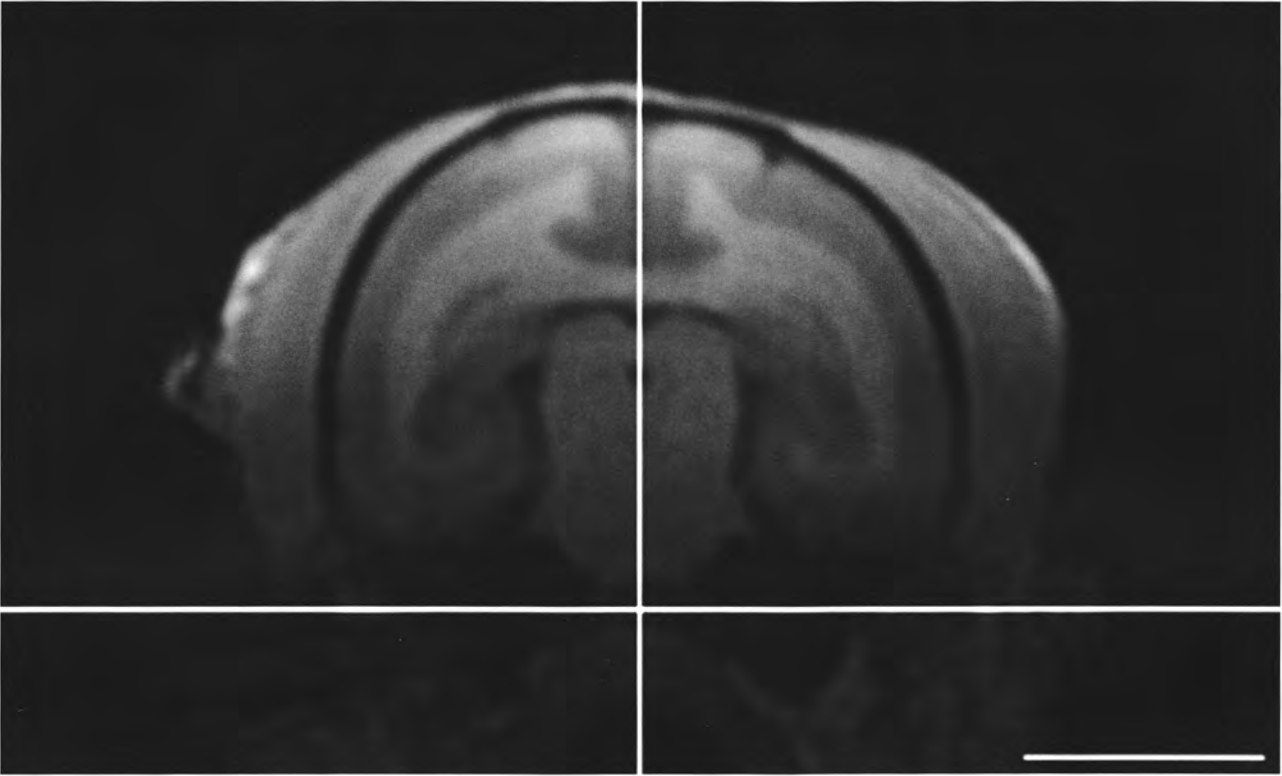
2 mm rostral to the interaural line; $y=+2$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-18

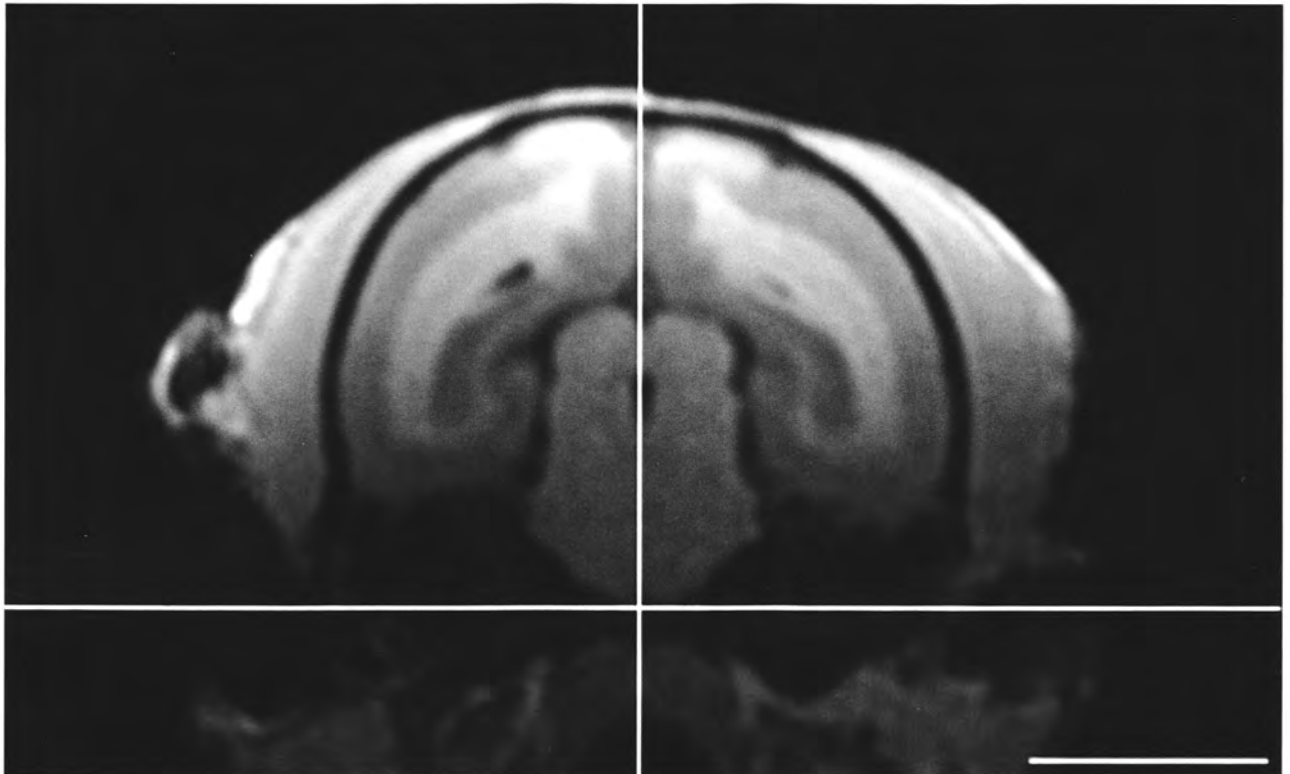


1 mm rostral to the interaural line; $y=+1$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.



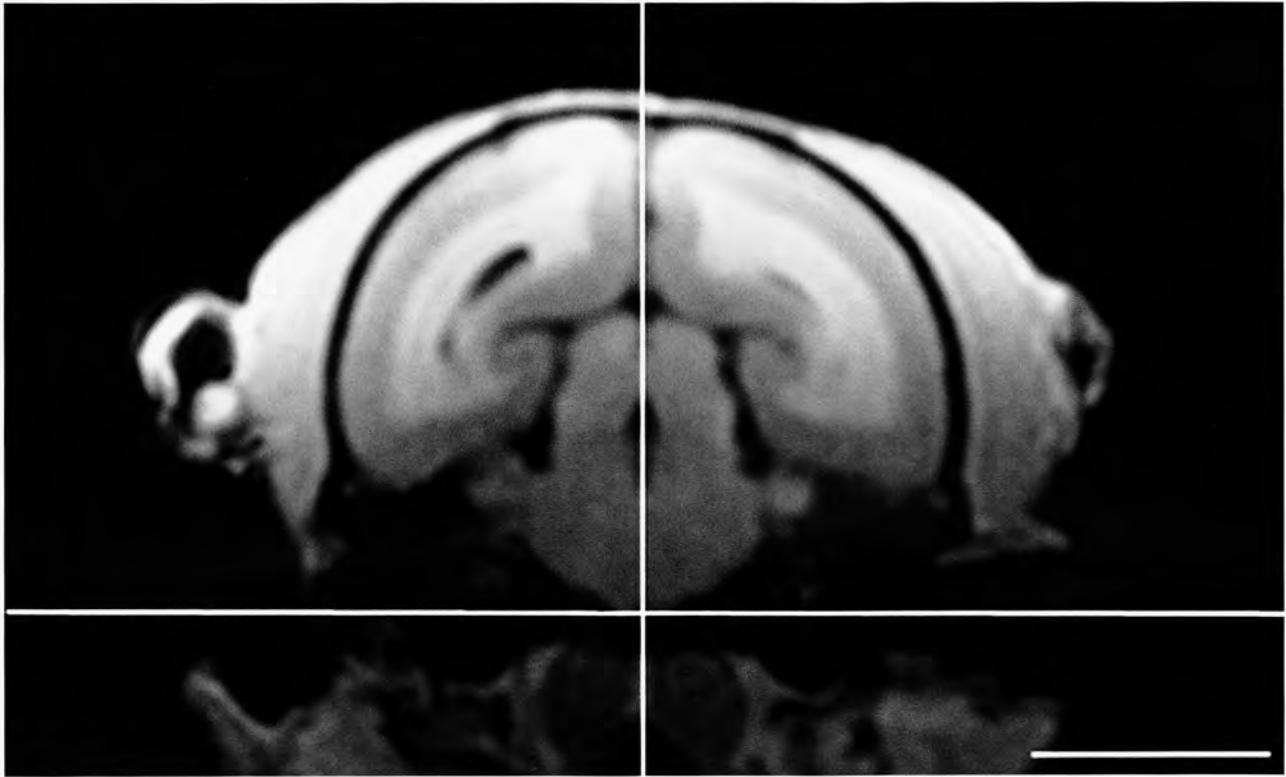
0 mm from the interaural line; $y=0$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

MRI cor-20

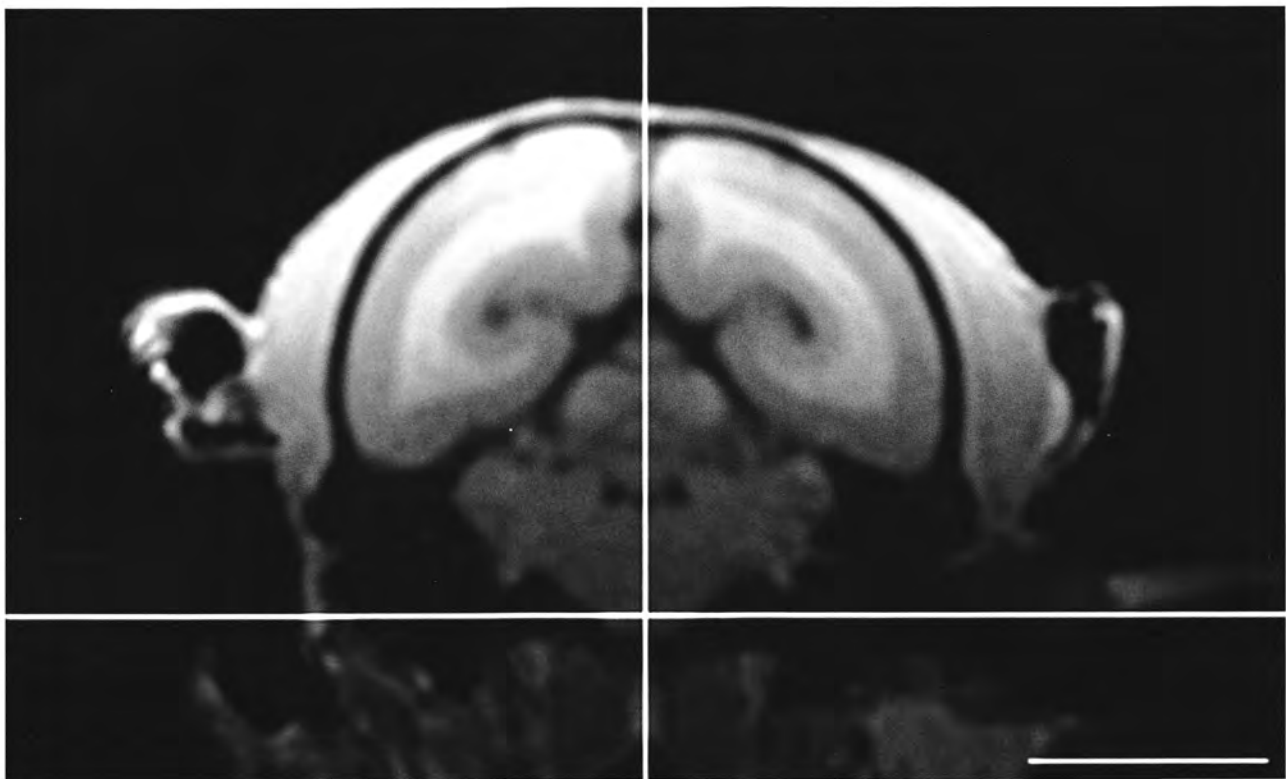


1 mm caudal to the interaural line; $y=-1$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

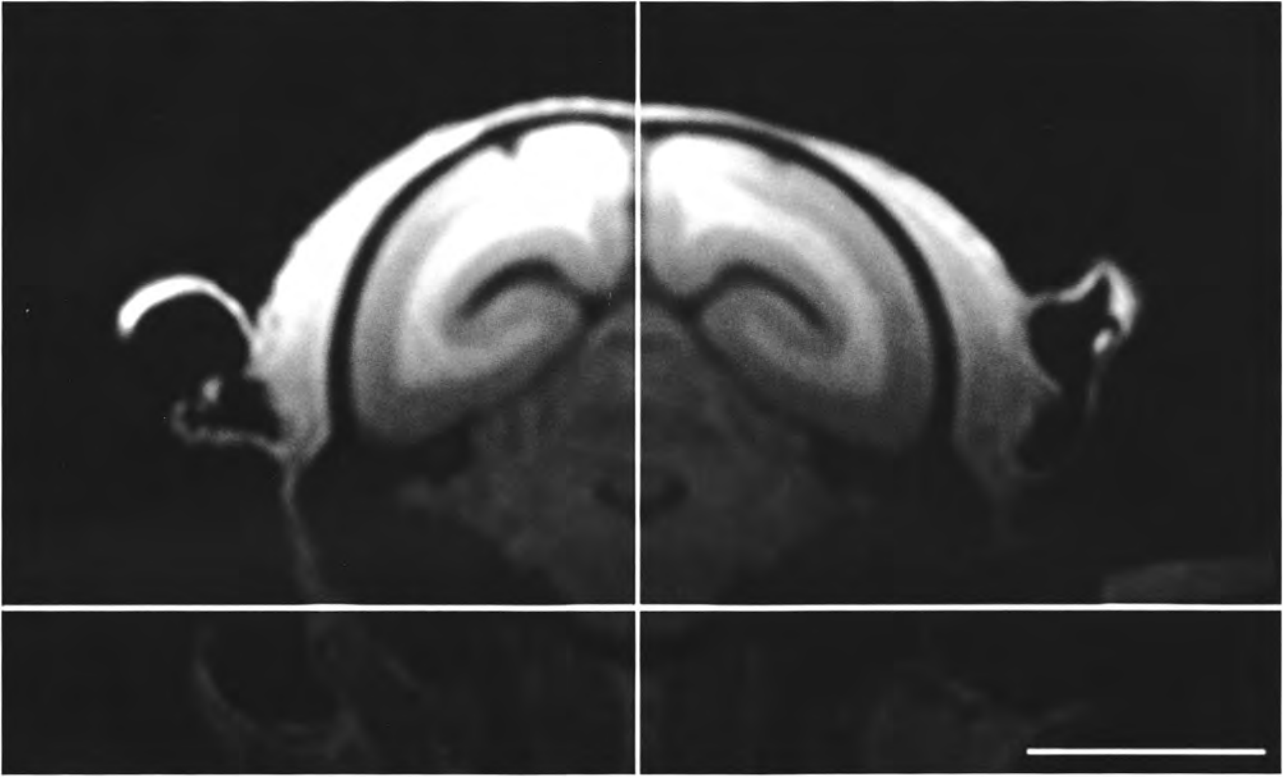


2 mm caudal to the interaural line; $y=-2$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

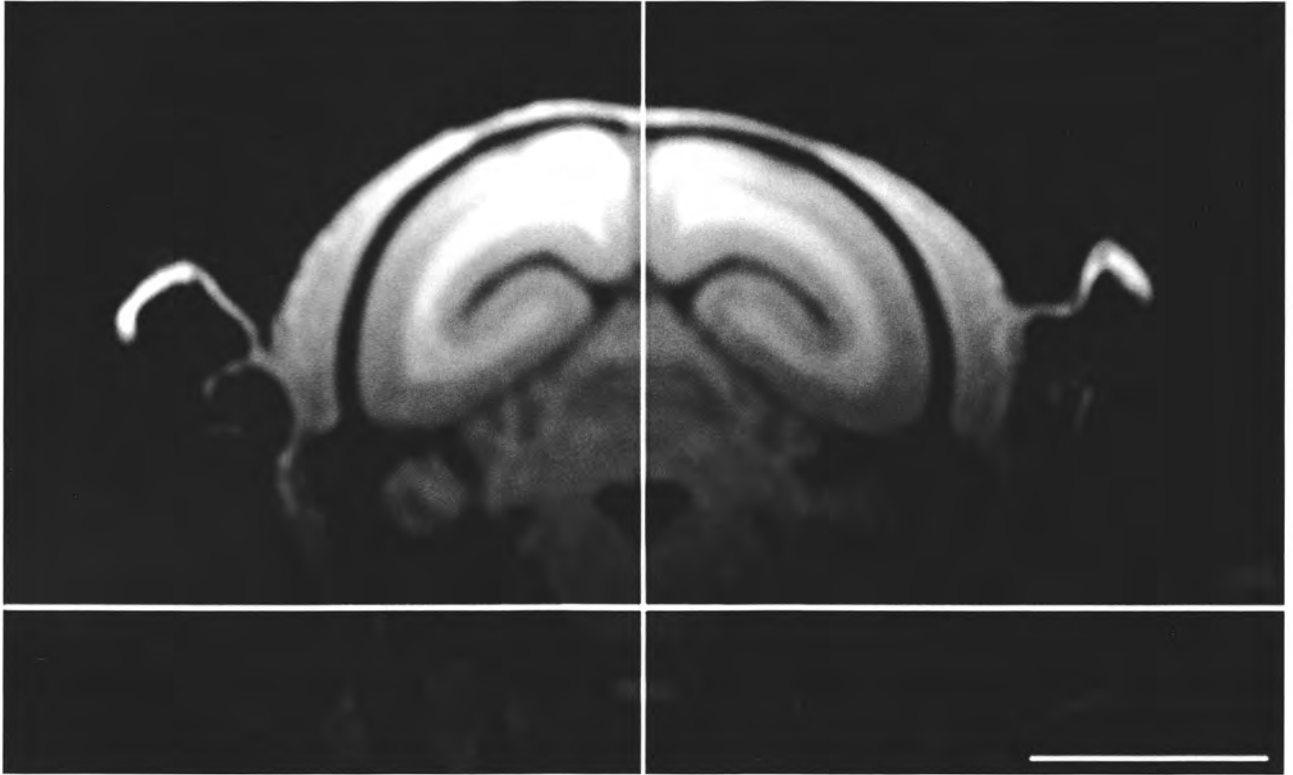


3 mm caudal to the interaural line; $y=-3$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

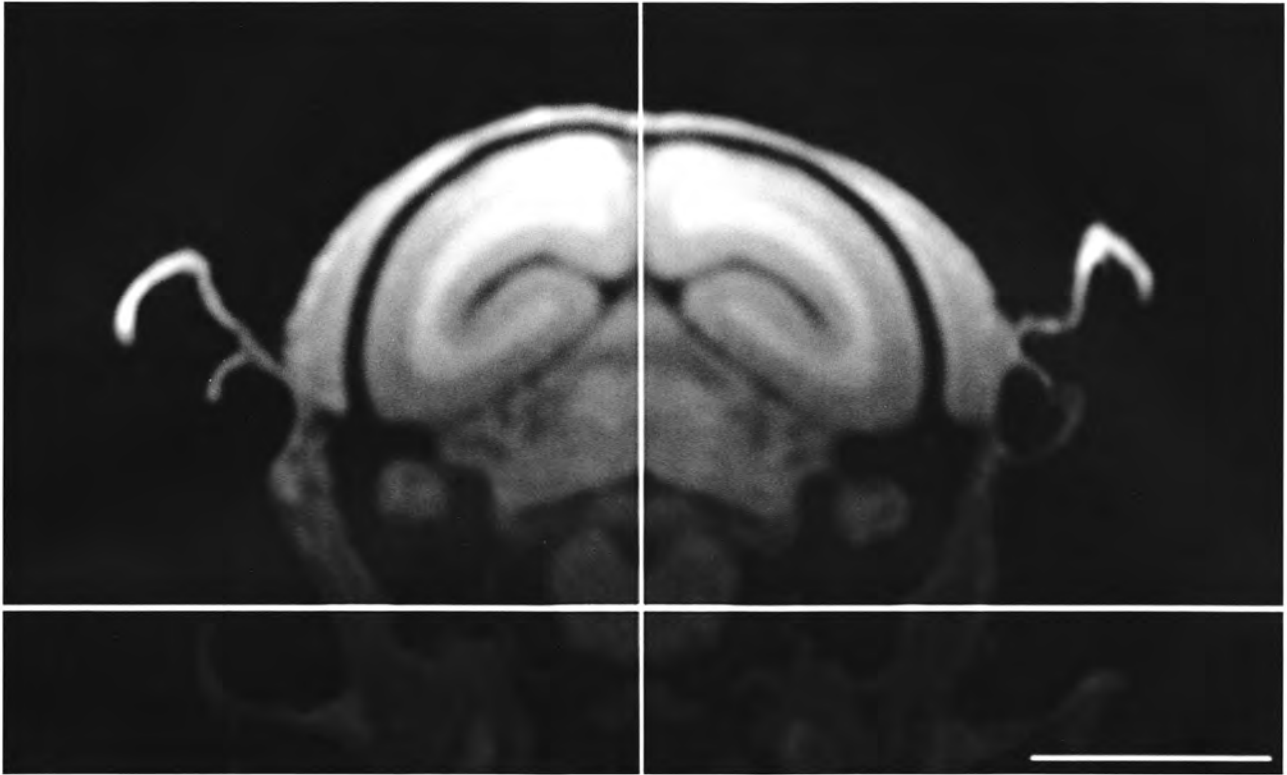


4 mm caudal to the interaural line; $y=-4$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

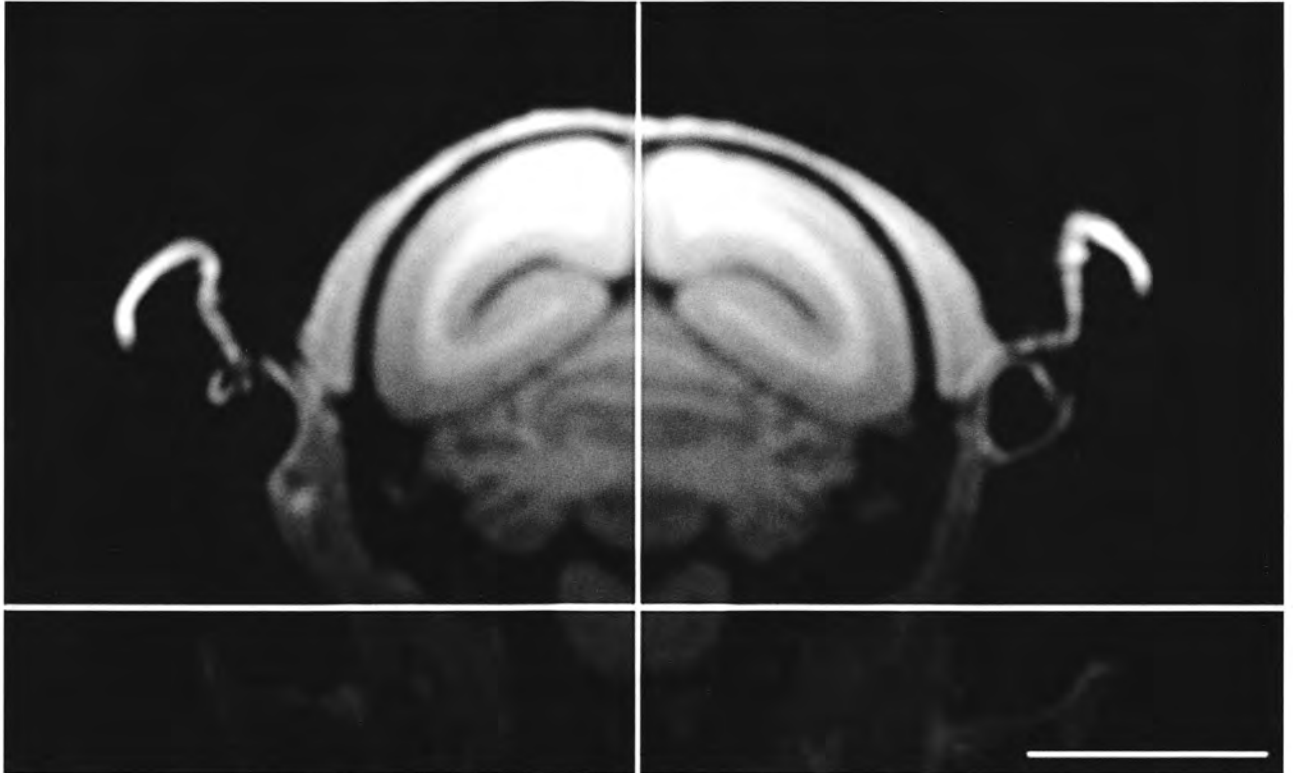


5 mm caudal to the interaural line; $y=-5$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

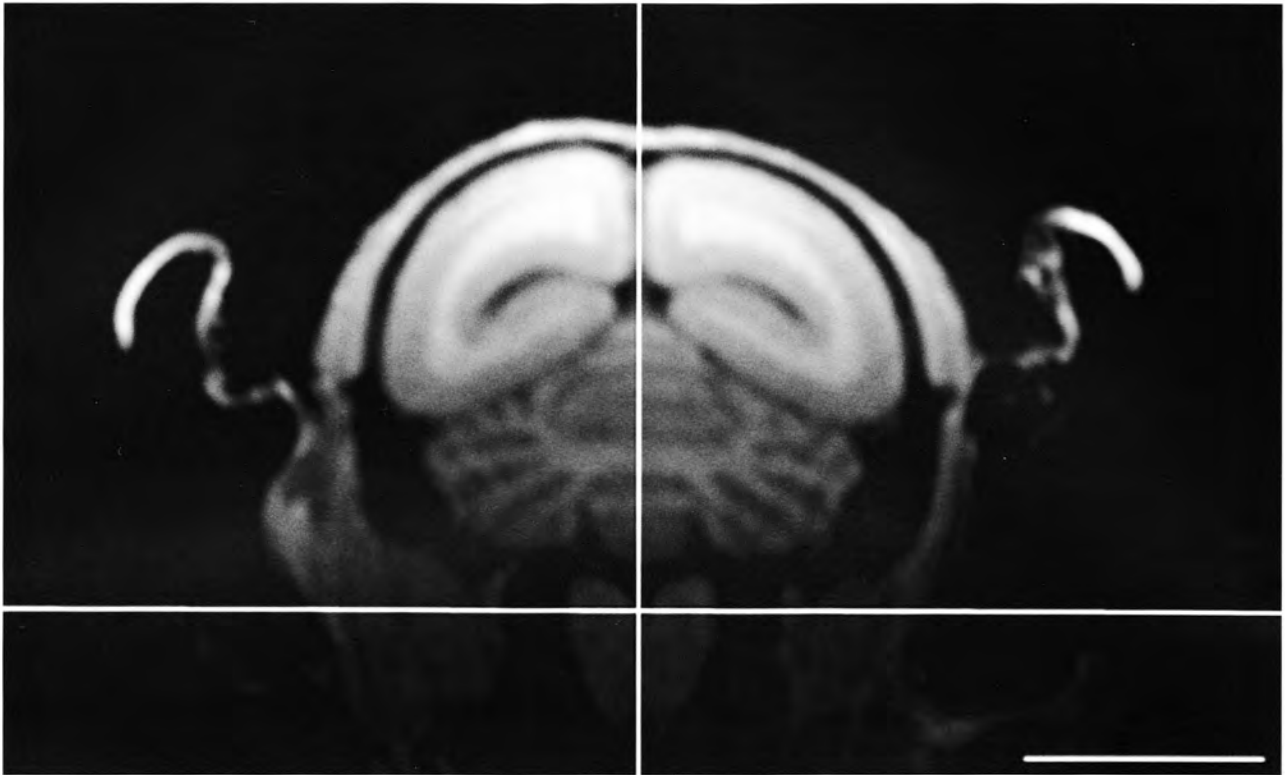


6 mm caudal to the interaural line; $y=-6$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

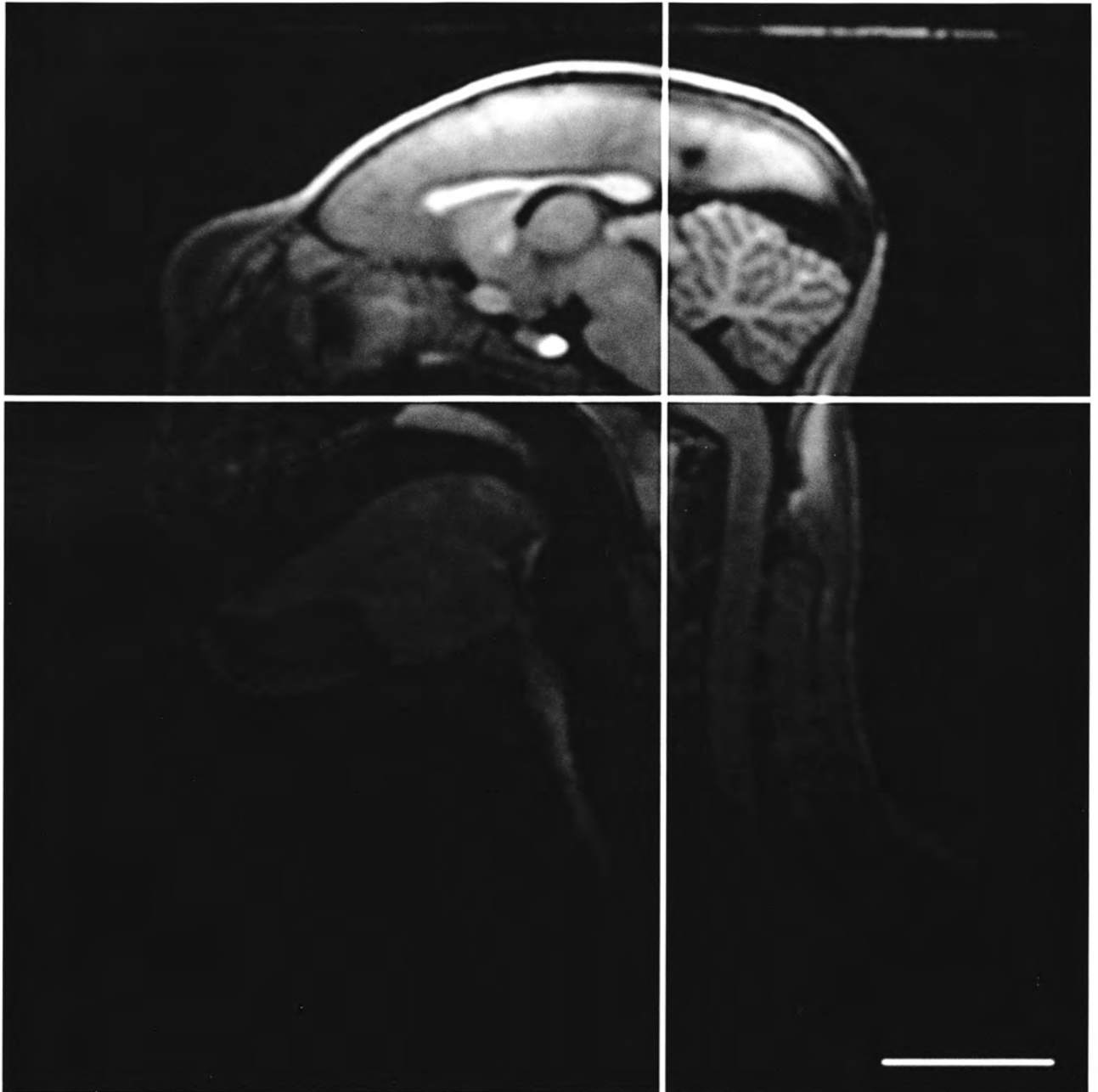


7 mm caudal to the interaural line; $y=-7$

Horizontal line represents the level of the interaural line.

Vertical line represents the level of the interhemispheric fissure.

Scale bar, 10 mm.

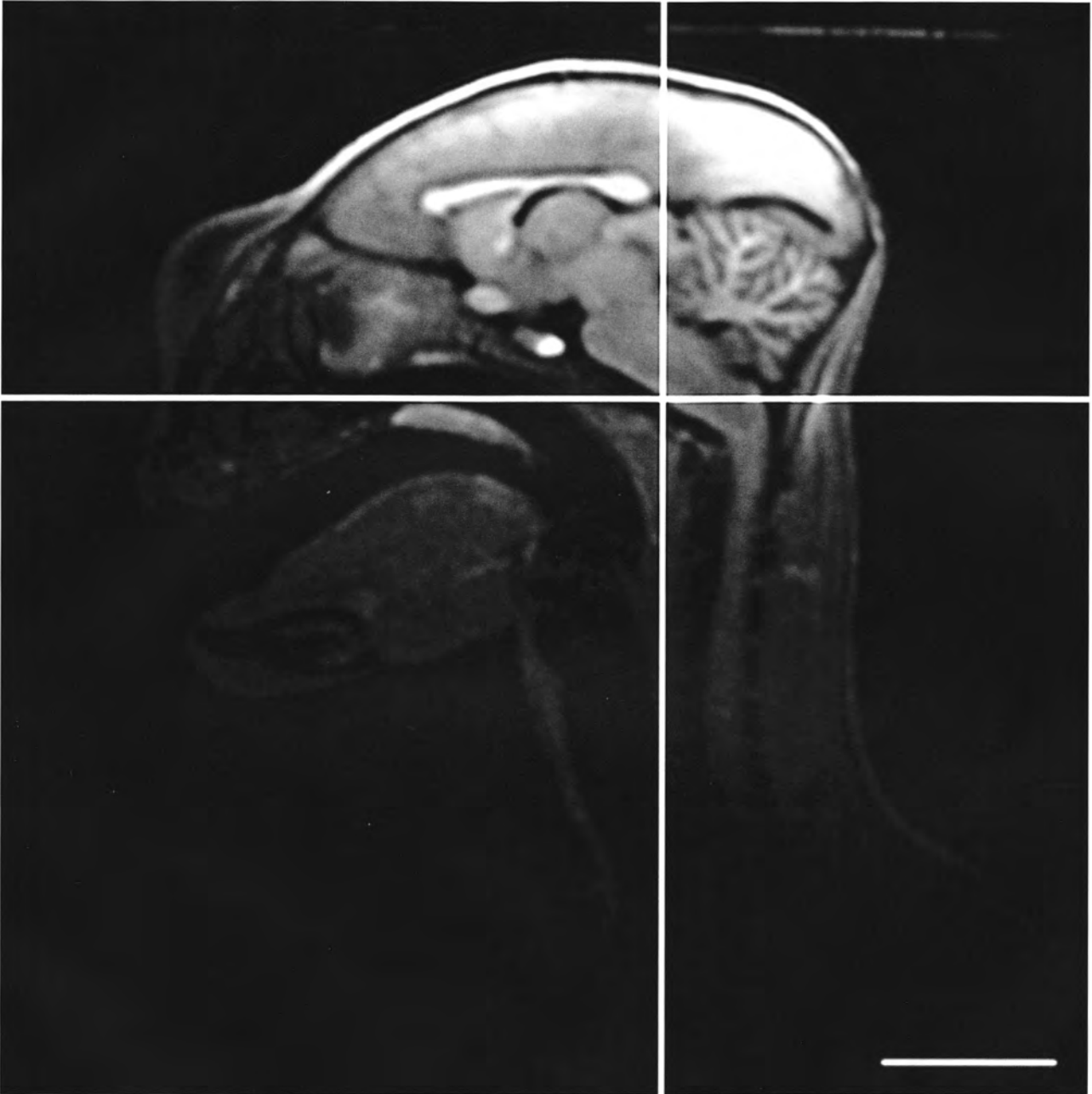


0 mm from the interhemispheric fissure; $x=0$

Horizontal and vertical lines represent the level of the interaural line.

Scale bar, 10 mm.

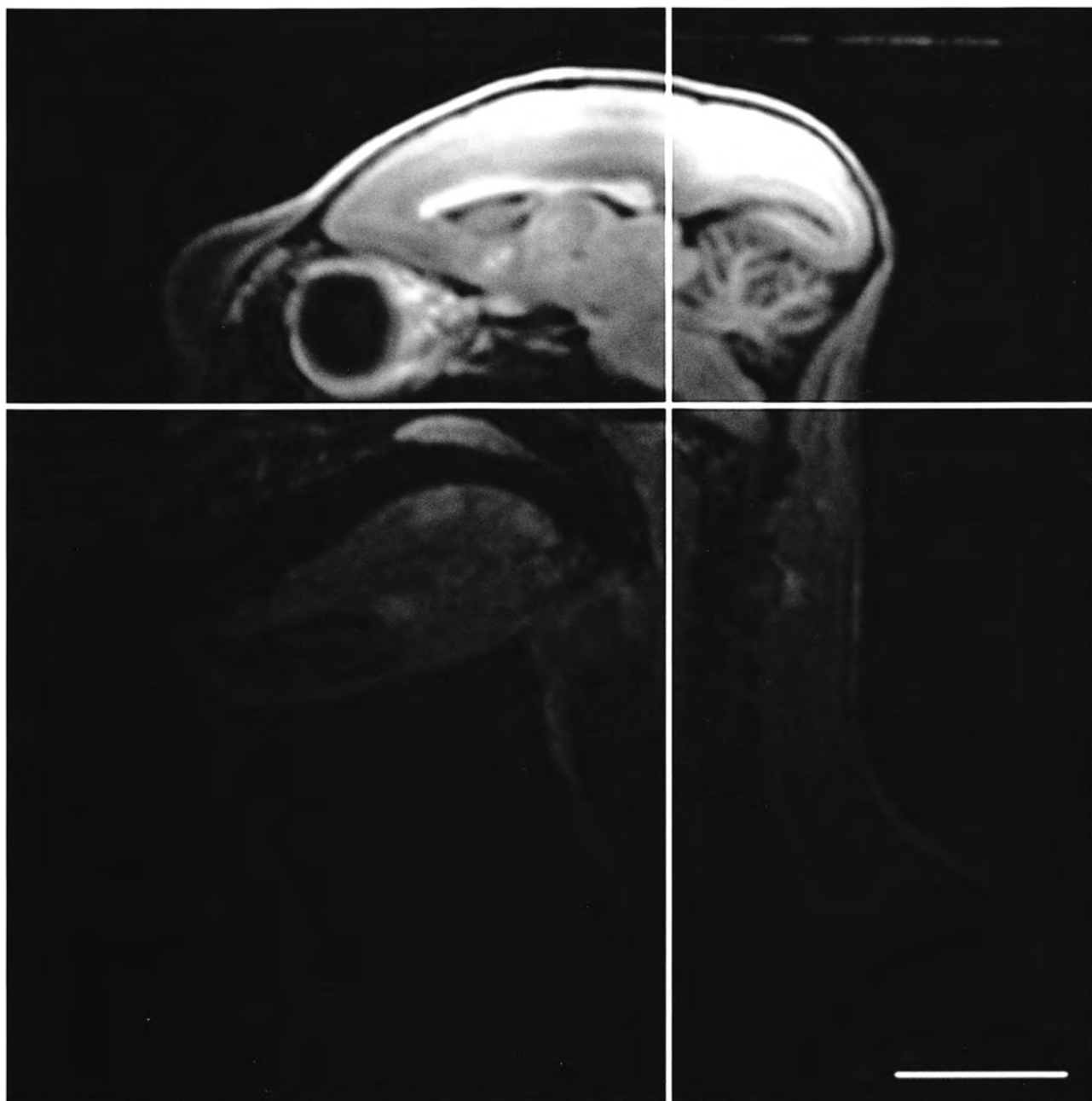
MRI psg-02



1.0 mm from the interhemispheric fissure; $x=+1$

Horizontal and vertical lines represent the level of the interaural line.

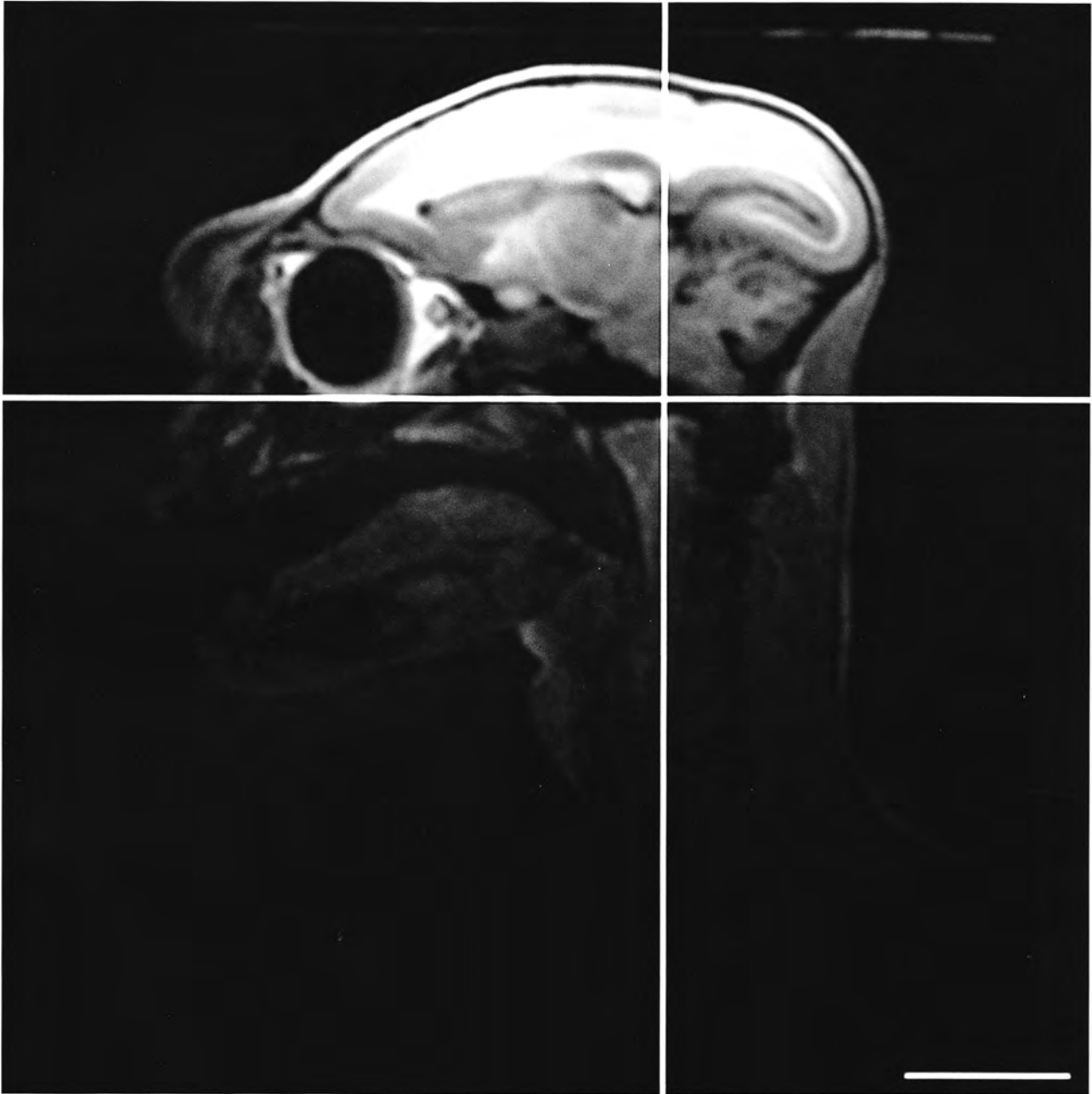
Scale bar, 10 mm.



2.0 mm from the interhemispheric fissure; $x=+2$

Horizontal and vertical lines represent the level of the interaural line.

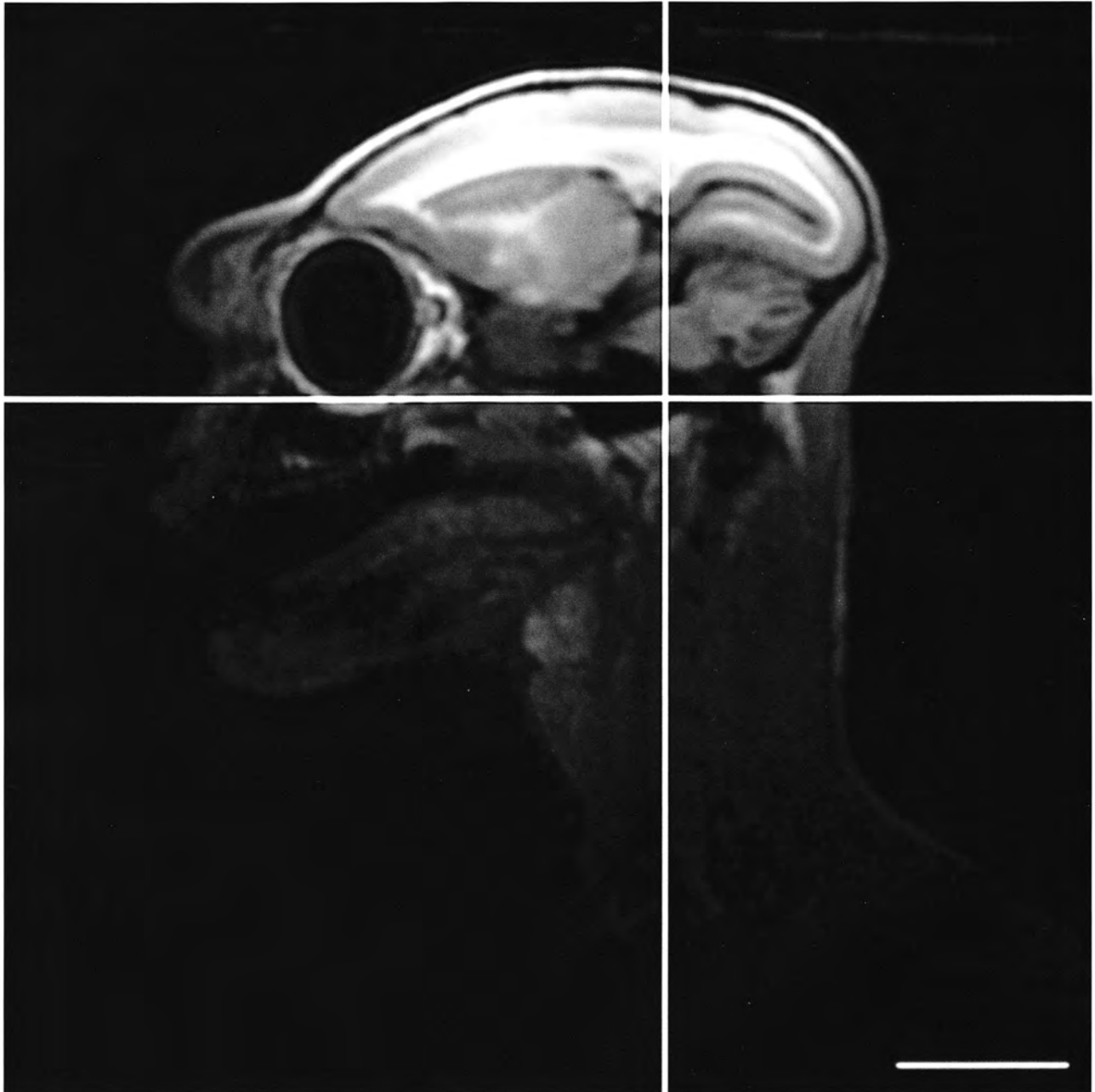
Scale bar, 10 mm.



3.0 mm from the interhemispheric fissure; $x=+3$

Horizontal and vertical lines represent the level of the interaural line.

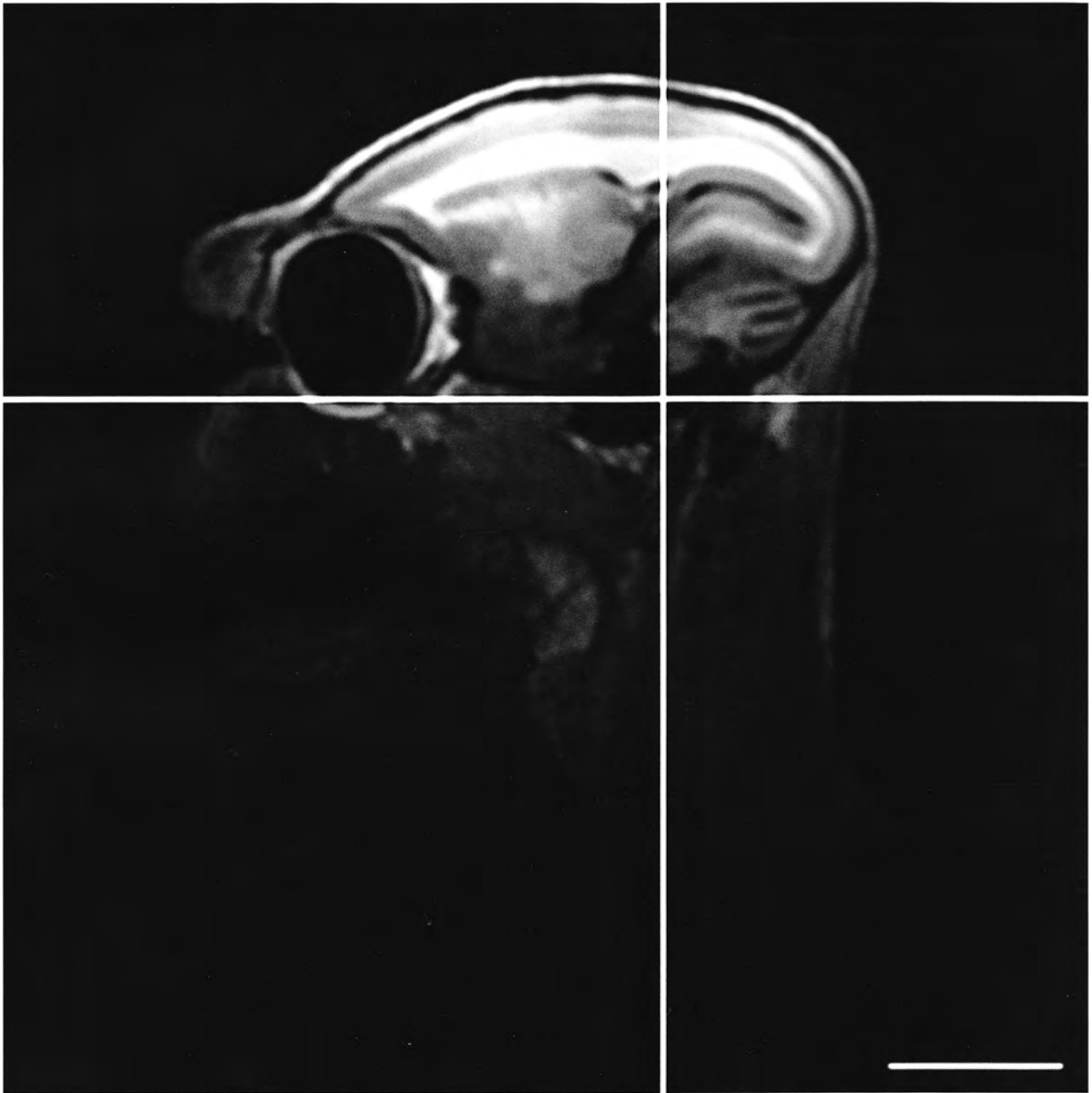
Scale bar, 10 mm.



4.0 mm from the interhemispheric fissure; $x=+4$

Horizontal and vertical lines represent the level of the interaural line.

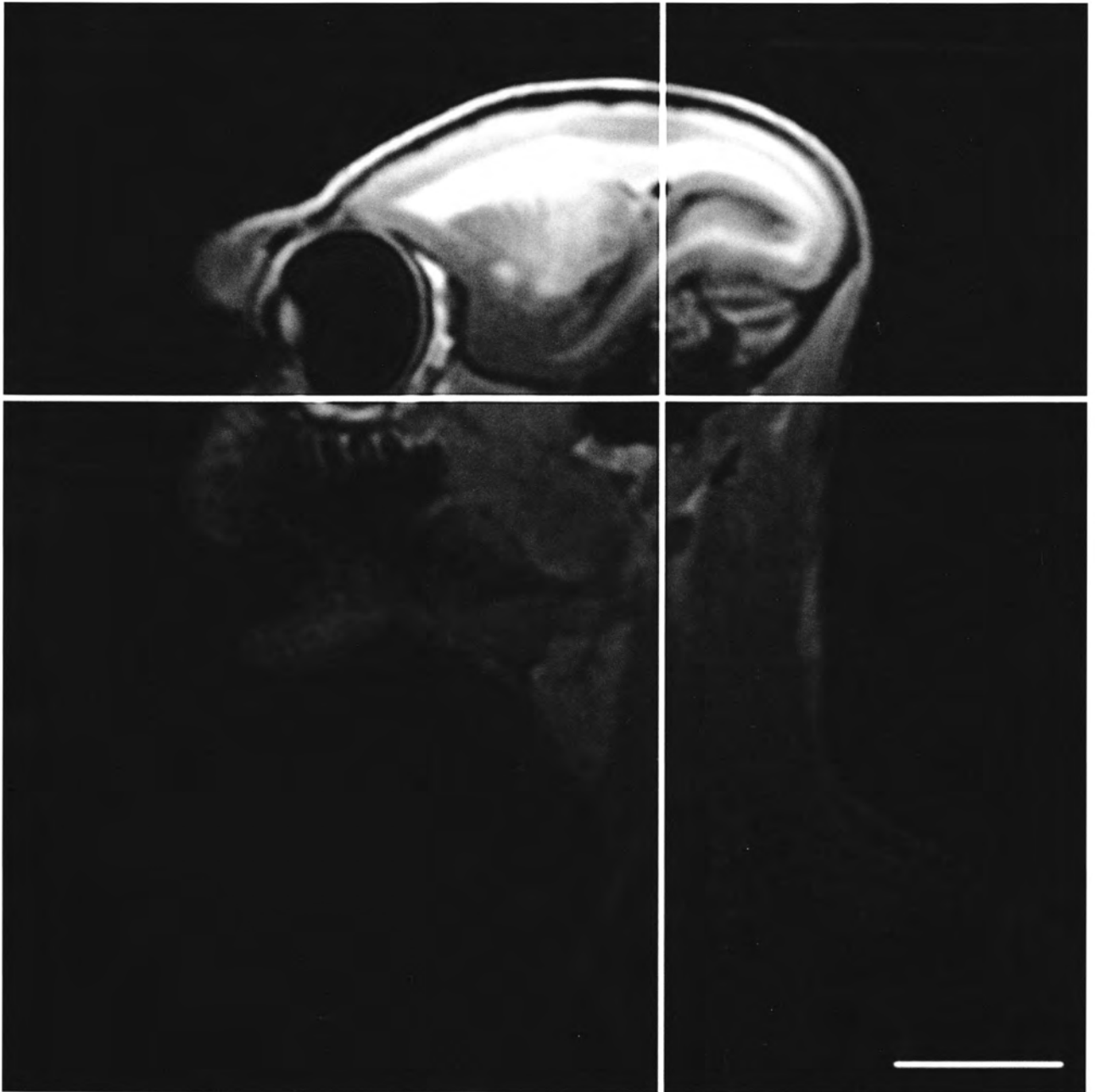
Scale bar, 10 mm.



5.0 mm from the interhemispheric fissure; $x=+5$

Horizontal and vertical lines represent the level of the interaural line.

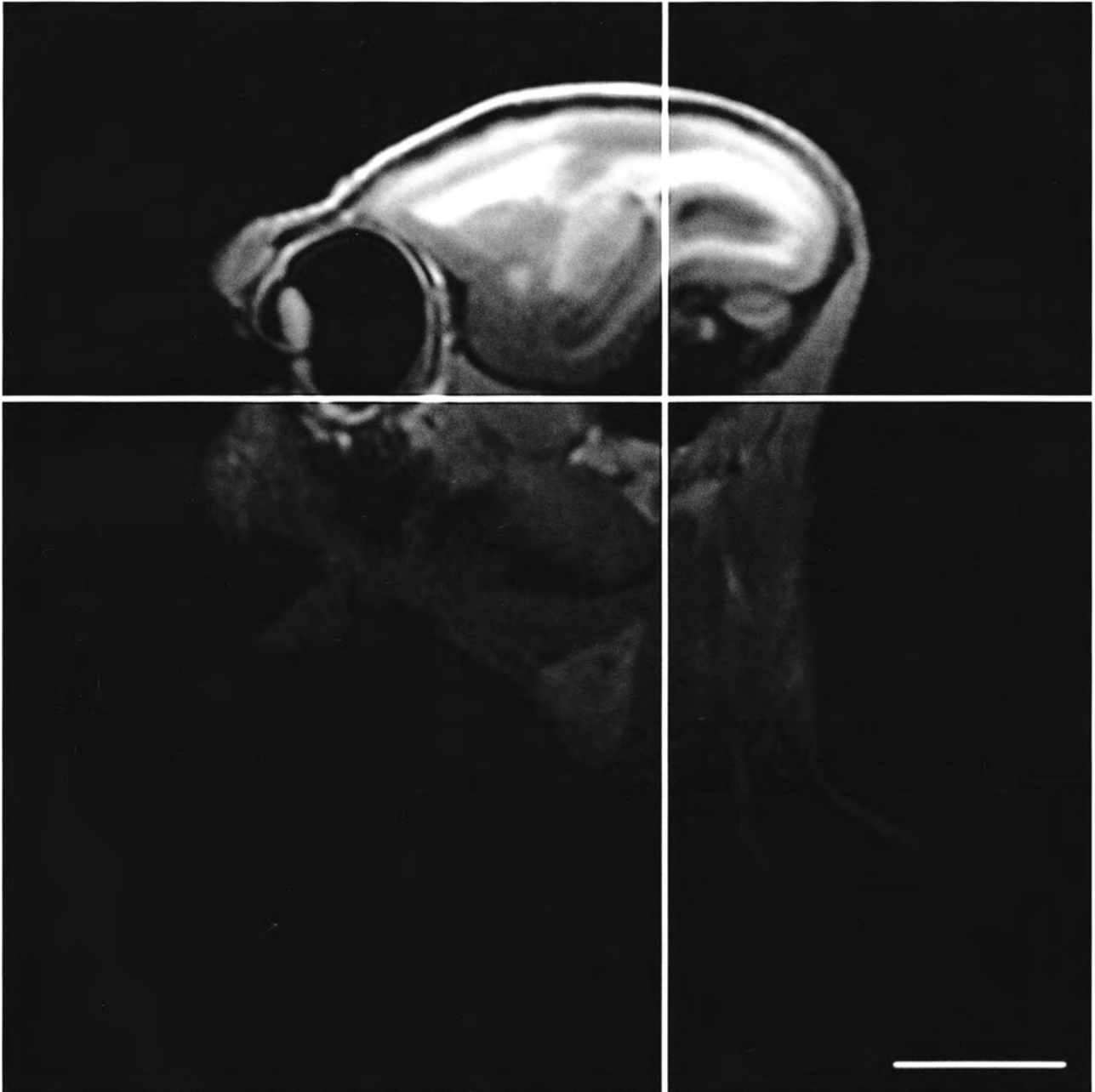
Scale bar, 10 mm.



6.0 mm from the interhemispheric fissure; $x=+6$

Horizontal and vertical lines represent the level of the interaural line.

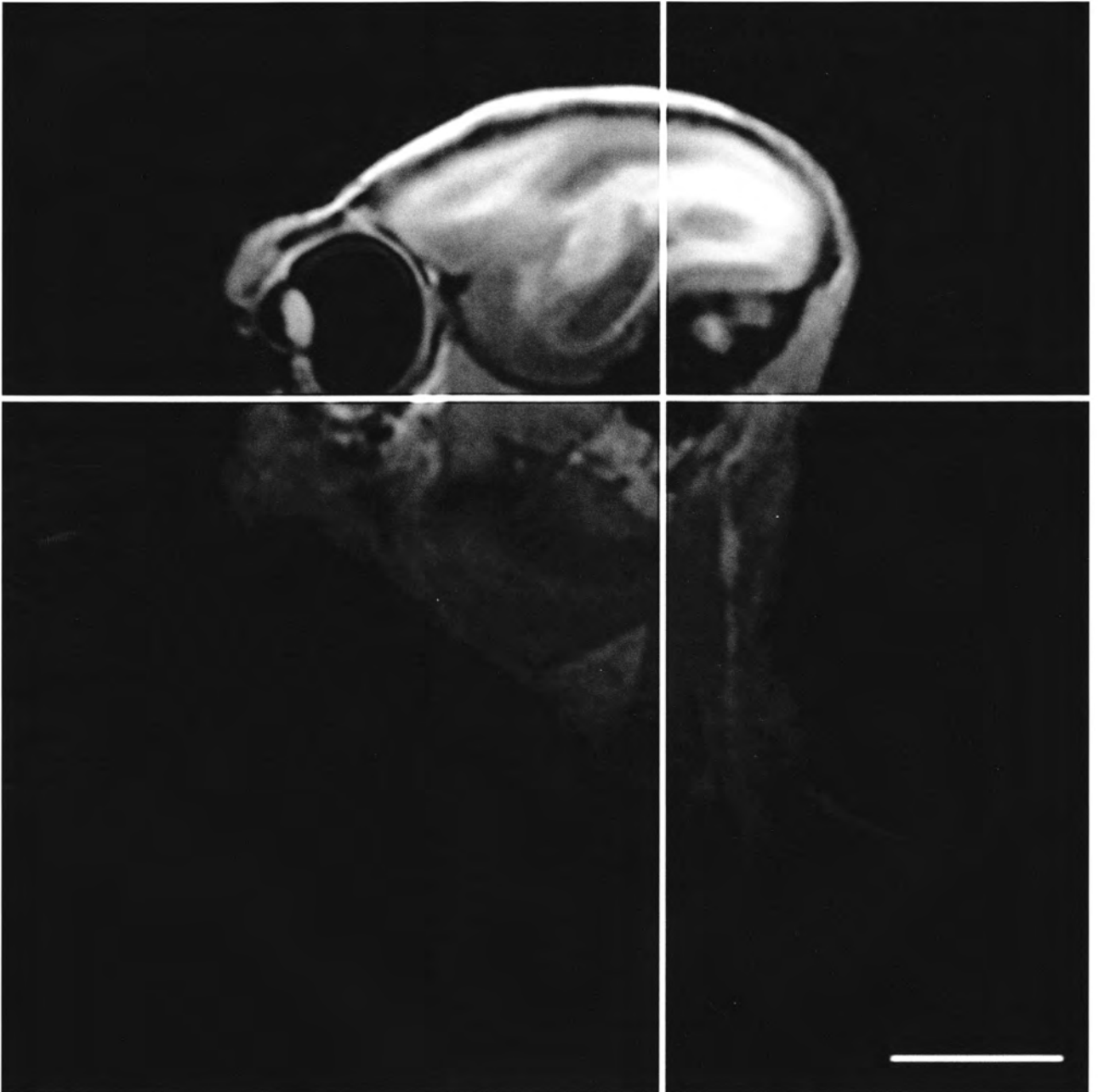
Scale bar, 10 mm.



7.0 mm from the interhemispheric fissure; $x=+7$

Horizontal and vertical lines represent the level of the interaural line.

Scale bar, 10 mm.

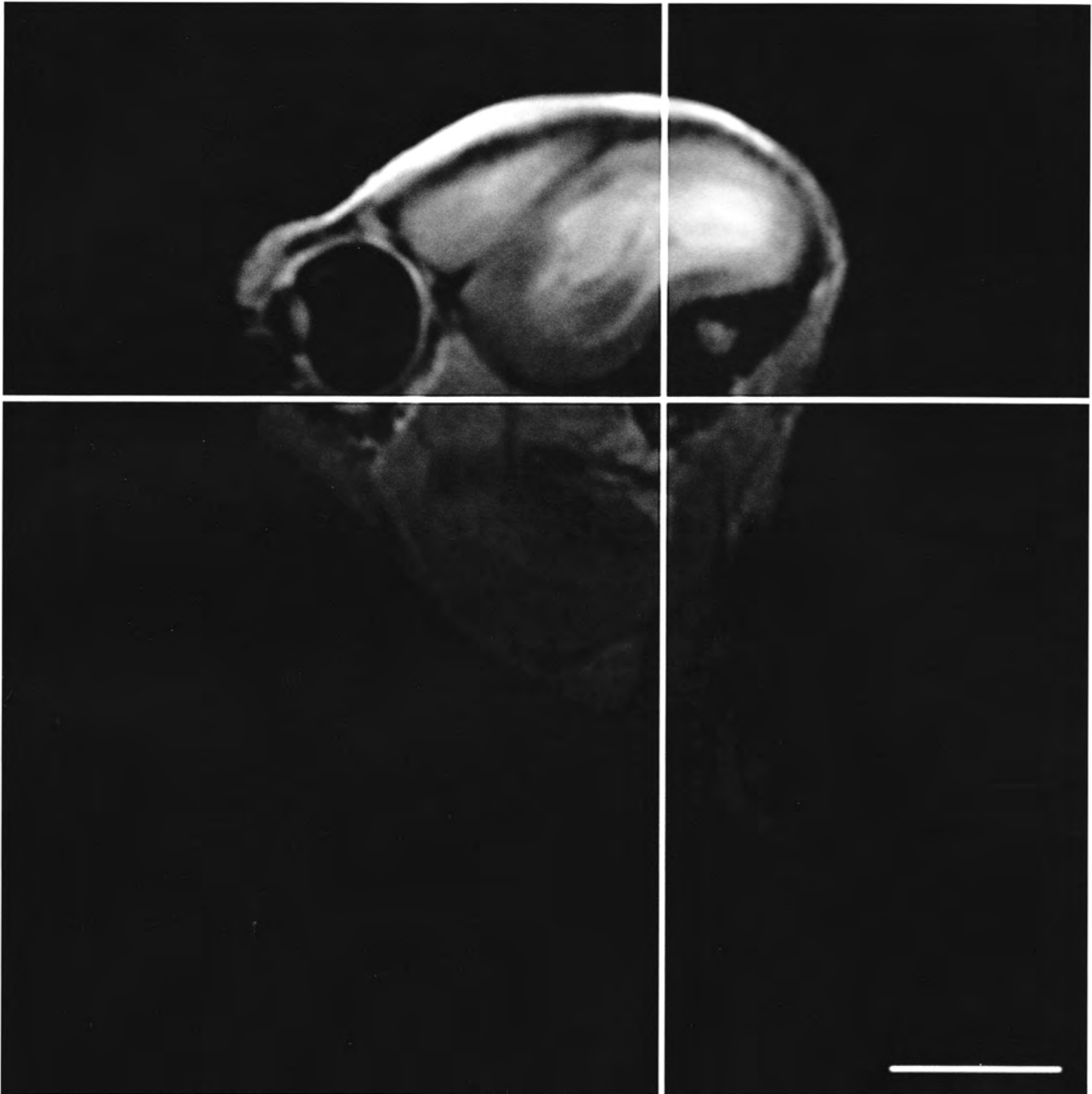


8.0 mm from the interhemispheric fissure; $x=+8$

Horizontal and vertical lines represent the level of the interaural line.

Scale bar, 10 mm.

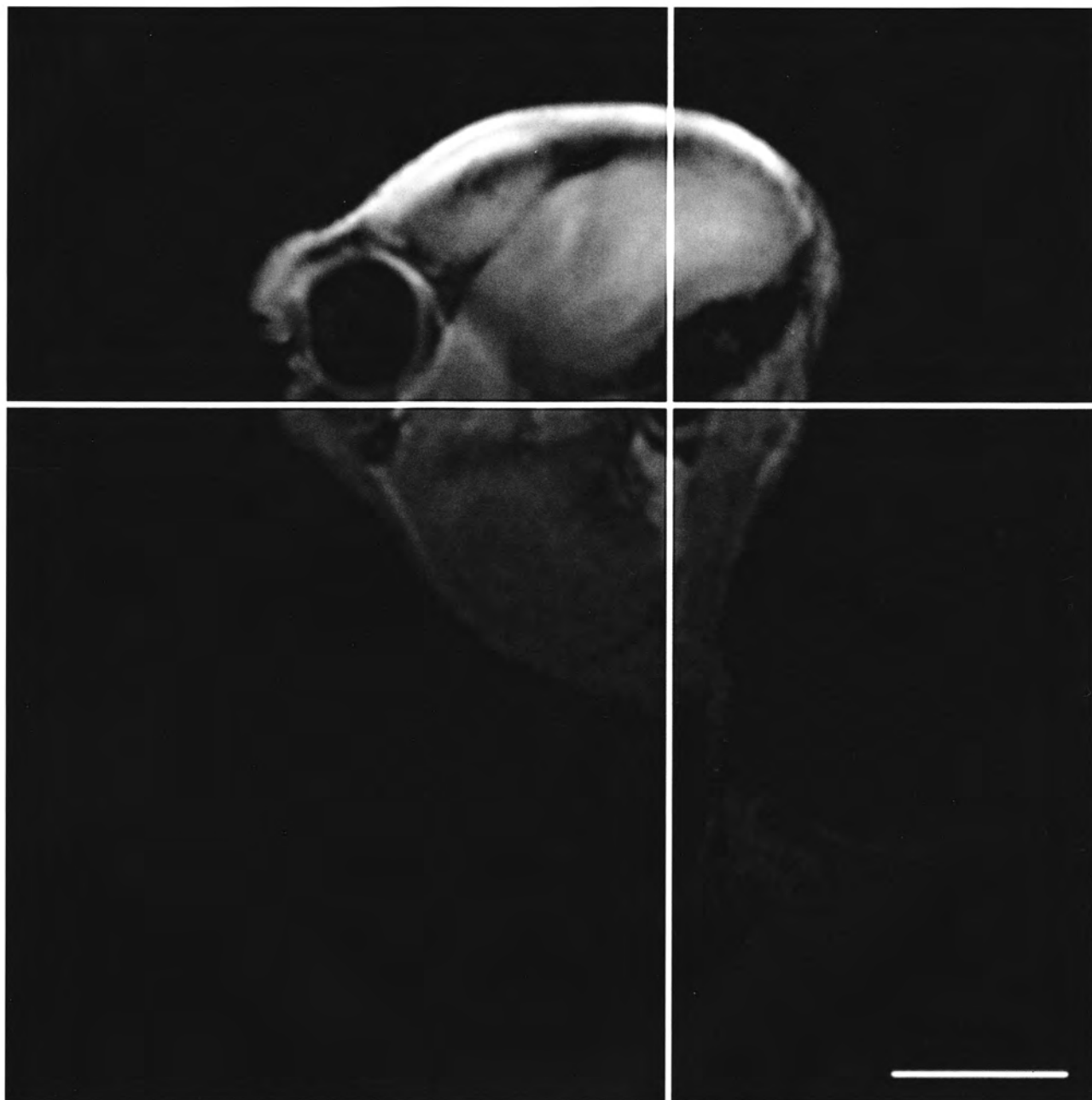
MRI psg-10



9.0 mm from the interhemispheric fissure; $x=+9$

Horizontal and vertical lines represent the level of the interaural line.

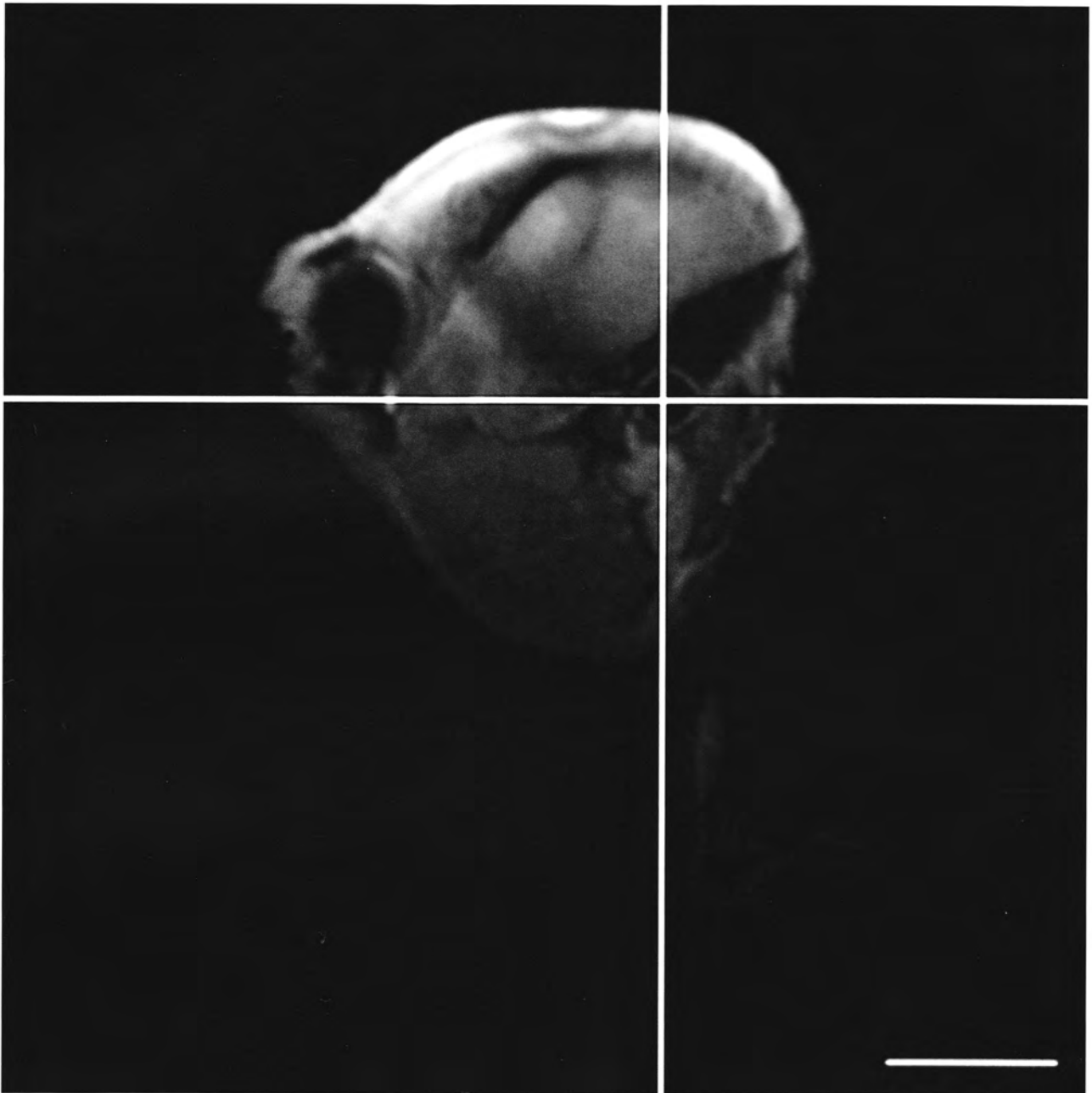
Scale bar, 10 mm.



10.0 mm from the interhemispheric fissure; $x=+10$

Horizontal and vertical lines represent the level of the interaural line.

Scale bar, 10 mm.



11.0 mm from the interhemispheric fissure; $x=+11$

Horizontal and vertical lines represent the level of the interaural line.

Scale bar, 10 mm.